HaoLi

CEO & Co-Founder, Pinscreen, Inc.
Professor, Mohamed bin Zayed University of Artificial Intelligence
Director, MBZUAI Metaverse Center

Pinscreen, Inc.
11766 Wilshire Blvd, Suite 840
Los Angeles, CA 90025, USA

Email *hao@hao-li.com*
Home page *http://www.hao-li.com/*
Facebook *http://www.facebook.com/li.hao/*

PROFILE

Date of birth	17/01/1981
Place of birth	Saarbrücken, Germany
Citizenship	German
Languages	German, French, English, and Mandarin Chinese (all fluent and no accents)

BIO

I am the CEO and Co-Founder of Pinscreen, an LA-based startup that builds the most advanced generative AI technology for visual effects, dubbing, and digital humans. I am also Professor of Computer Vision at the Mohamed bin Zayed University of Artificial Intelligence, and Director of the MBZUAI Metaverse Center. Before that, I was a Distinguished Fellow of the Computer Vision Group at UC Berkeley and Associate Professor of Computer Science at the University of Southern California, where I also directed the USC Institute for Creative Technologies. I have also been a Visiting Professor at Weta Digital, a research lead at Industrial Light & Magic / Lucasfilm, and a postdoctoral fellow at Columbia and Princeton Universities. My research lies at the intersection of Computer Vision, Computer Graphics, and Machine Learning with a focus on photorealistic human digitization, real-time performance capture, immersive telepresence, and generative video synthesis and manipulation (deepfakes). I'm known for my work in real-time 3D facial tracking, which has led to the technology behind Apple's Animoji, the digital recreation of Paul Walker in the movie Furious 7, and the first real-time deepfake face-swapping technology based on generative AI. My research on facial reenactment has been widely adopted in Hollywood, driving advancements in photorealistic digital doubles and seamless de-aging effects. I'm also known for pioneering production-grade visual dubbing solutions, which have made possible the first fully AI-lip-synced foreign language films and TV shows dubbed into English. My company, Pinscreen, and I have been credited in numerous motion pictures, including Fallout, Slumberland, Blade Runner 2049, Furious 7, and The Hobbit: The Battle of the Five Armies. My algorithms on deformable shape registration have not only advanced the field of data-driven human modeling, but also improved the radiation treatment for cancer patients all over the world through my collaboration with C-RAD on surface guided radiation therapy. In 2013, have been named one of the world's top 35 innovator under 35 by MIT Technology Review and in 2015, I have been awarded the Google Faculty Award, the Okawa Foundation Research Grant, and the Andrew and Erna Viterbi Early Career Chair. I am ranked #1 on Microsoft Academic in 2016 on the top 10 leaderboard in Computer Graphics for the past five years. In 2018, I won the Office of Naval Research (ONR) Young Investigator Award, and in 2019, I have been named to the DARPA Information Science and Technology (ISAT) Study Group. I have received the ACM Symposium on Computer Animation Best Paper Award in 2009, the ACM SIGGRAPH Real-Time Live! "Best in Show" Award in 2020, and an Epic Megagrant in 2021. I have been speaker at the World Economic Forum in Davos (2020) and was featured in the inaugural season of Amazon's documentary series re:MARS Luminaries in 2022. I have obtained my PhD from ETH Zurich and my MSc from the University of Karlsruhe (TH). I also serve as expert witness for IP litigation relating to Computer Vision and Graphics.

Google Scholar **https://scholar.google.com/citations?user=NFeigSoAAAAJ&hl=en**
Publication Impact (04/22/2025) **total citations = 18,985; *h*-index = 60; i10-index = 100**

EDUCATION

Ph. D., Computer Science **07/2006 - 11/2010**
ETH Zurich, Department of Computer Science

- Thesis: *Animation Reconstruction of Deformable Surfaces*
  Advisor: Prof. M. Pauly

M. Sc., Computer Science **10/2000 - 01/2006**
Universität Karlsruhe (TH), Department of Computer Sciences

- Thesis: *Reconstruction of Colored Objects from Structured Illuminated Views*
  Advisor: Prof. H. Prautzsch
- Major 1: Computer graphics and geometric modeling
- Major 2: Cryptography and security
- Minor: Differential and projective geometry

ERASMUS Student Exchange, Computer Science **10/2002 - 09/2003**
Institut National Polytechnique de Grenoble, ENSIMAG

French-German High School Diploma **09/1992 - 05/1999**
Lycée Franco-Allemand de Sarrebruck, Germany

POSITIONS

Pinscreen, Inc. **10/2015 - ongoing**
CEO & Co-Founder

Mohamed bin Zayed University of Artificial Intelligence
Director & Founder, MBZUAI Metaverse Center **06/2022 - ongoing**
Professor (with Tenure), Computer Vision Department **11/2024 - ongoing**
Associate Professor (with Tenure), Computer Vision Department **05/2022 - 11/2024**

Nesa Labs, Inc. **12/2024 - ongoing**
Chief Scientific Advisor

University of California, Berkeley **11/2020 - 05/2022**
Distinguished Fellow, Computer Vision Group

University of Southern California
Director, USC Institute for Creative Technologies, Vision and Graphics Lab **08/2016 - 06/2020**
Associate Professor (with Tenure), Computer Science Department **05/2019 - 06/2020**
Assistant Professor, Andrew and Erna Viterbi Early Career Chair, Computer Science Department **08/2013 - 05/2019**

Weta Digital **06/2014 - 08/2014**
Visiting Professor, Virtual Studio Group

Industrial Light & Magic, Lucasfilm Ltd. **04/2012 - 07/2013**
Research Lead, R&D Group

Columbia University **04/2011 - 03/2012**
Postdoctoral Fellow, Columbia Computer Graphics Group

Princeton University **04/2011 - 03/2012**
Visiting Postdoctoral Researcher, Princeton Computer Graphics Group

École Polytechnique Fédérale de Lausanne **02/2010 - 04/2011**
Visiting and Postdoctoral Researcher, Computer Graphics and Geometry Laboratory

Industrial Light & Magic, Lucasfilm Ltd. **07/2009 - 10/2009**
Research Intern, R&D Group

Stanford University **07/2008 - 09/2008**
Visiting Researcher, Geometric Computing Group

ETH Zurich **07/2006 - 11/2010**
Research Assistant, Applied Geometry Group

National University of Singapore **01/2006 - 07/2006**
Visiting Research Scholar, Centre for Information Mining and Extraction

TEACHING

Lecturer

Mohamed bin Zayed University of Artificial Intelligence

- CV 804: 3D Rendering and Geometry Processing (Lecture) SS 2024
- CV 802: Advanced 3D Computer Vision (Lecture) FS 2023, FS 2024
- CV 702: 3D Geometry for Computer Vision (Lecture) SS 2023

University of Southern California, Computer Science Department

- CSCI 621: Digital Geometry Processing (Lecture) SS 2017, SS 2018, and SS 2019
- CSCI 420: Computer Graphics (Lecture) FS 2014, FS 2015, FS 2017, and FS 2018
- CSCI 599: Digital Geometry Processing (Lecture) SS 2014 and SS 2015

Instructor/Host

Mohamed Bin Zayed University of Artificial Intelligence

- MEP05: MBZUAI Executive Program: The Future of Robotics SS 2023
- AI & Data For Leadership - Department of Government Enablement: Computer Vision, FS 2024
- AI For Leadership: Computer Vision & Metaverse, SS 2024
- AI For Leadership: Metaverse, FS 2023
- AI For Leadership: Computer Vision, Metaverse, Robotics & Autonomous Driving, SS 2023
- AI For Leadership: Deep Learning, Computer Vision, NLP & Metaverse, Cohort 2, FS 2022
- AI For Leadership: Deep Learning, Computer Vision, NLP & Metaverse, Cohort 1, FS 2022
- MEP05: MBZUAI Executive Program: The Future of Robotics FS 2022

Guest Lecturer

University of Southern California, Computer Science Department

- QBIO 105: Introduction to Quantitative Biology Seminar SS 2020 and SS 2024
- CSCI 576: Multimedia Systems Design (Lecture) FS 2016
- EE 598: Electrical Engineering Research Seminar (Lecture) SS 2016
- CSCI 697: Seminar in Computer Science Research (Lecture) FS 2015 and FS 2017
- CSCI 109: Introduction to Computing (Lecture) SS 2014 and FS 2015
- CSCI 597: Seminar in Computer Science Research (Lecture) FS 2013
- ENGR 102: Freshmen Academies (Lecture) FS 2013

Stanford University, Computer Science Department

- CS148: Introduction to Computer Graphics & Imaging (Lecture) 2012

Columbia University, Computer Science Department

- Computer Graphics (Lecture) 2011

Teaching Assistant

École Polytechnique Fédérale de Lausanne, School of Computer and Communication Sciences

- Digital 3D Geometry Processing (Lecture) 2010
- Computer Graphics (Lecture) 2010

ETH Zurich, Department of Computer Science

- Surface Representation and Geometric Modeling (Lecture) 2007, 2008, and 2009
- Introduction to Computer Graphics (Lecture) 2006, 2007, 2008, and 2009
- Advanced Topics in Computer Graphics (Seminar) 2006 and 2007
- Geometric Computing (Seminar) 2008

MENTORING

Supervision

Mohamed Bin Zayed University of Artificial Intelligence, Computer Vision Department

- Dr. Yujian Zheng, Postdoctoral Researcher **08/2024 - ongoing**
- Xianhang Cheng, PhD Student **08/2024 - ongoing**
- Leyang Jin, PhD Student **08/2024 - ongoing**
- Thuan Hoang Nguyen, PhD Student **08/2024 - ongoing**
- Youssef Hamed Sayed Mahmoud Sharaf, PhD Student **08/2024 - ongoing**
- Cong Cao, PhD Student **08/2024 - ongoing**
- Ariana Michelle Bermudez Venegas, PhD Student **08/2024 - ongoing**
- Tingting Liao, PhD Student **08/2023 - ongoing**
- Mihail Mihaylov, PhD Student **08/2023 - ongoing**
- Yuchen Li, PhD Student **08/2023 - ongoing**
- Long-Nhat Ho, PhD Student **08/2022 - ongoing**
- Phong Tran, PhD Student **08/2022 - ongoing**
- Jiantong Zhao, MSc Student **10/2023 - ongoing**
- Vladislav Mitkin, MSc Student **10/2023 - ongoing**
- Zhenhui Lin, MSc Student **10/2022 - 06/2024**
- Yufei Zhang, MSc Student **10/2022 - 06/2024**
- Youssef Hamed Sayed Mahmoud Sharaf, MSc Student **10/2022 - 06/2024**
- Kane Lindsay, MSc Student **10/2022 - 06/2024**
- Cong Cao, MSc Student **10/2022 - 06/2024**
- Leena Ali Faisal Salem Bin Kuwair, MSc Student **10/2022 - 06/2024**
- Ariana Michelle Bermudez Venegas, MSc Student **10/2022 - 06/2023**
- Maksym Bekuzarov, MSc Student **10/2022 - 06/2023**
- Maksat Kengeskanov, MSc Student **10/2022 - 06/2023**
- Steven Phong Hoang, MSc Student **06/2022 - 06/2023**
- Valeriy Rotan, BSc Student (exchange student, UC Berkeley) **06/2022 - 01/2023**

MBZUAI Metaverse Center

- Ariana Michelle Bermudez Venegas, Project Manager **07/2023 - ongoing**
- Ekaterina Radionova, Research Scientist **08/2024 - ongoing**
- Adilbek Karmanov, Research Engineer **07/2023 - ongoing**
- Maksat Kengeskanov, Research Engineer **07/2023 - ongoing**

University of California, Berkeley, Computer Vision Group

- Ruilong Li, PhD Student (Co-Supervised with Angjoo Kanazawa) **08/2021 - 05/2022**
- Alex Yu, BSc Student **01/2021 - 05/2022**
- Divi Schmidt, BSc Student **06/2021 - 05/2022**
- Sarthak Kamat, BSc Student **06/2021 - 05/2022**
- Chenyue Cai, BSc Student **06/2021 - 05/2022**

University of Southern California, Computer Science Department

- Jiaman Li, PhD Student **09/2019 - 08/2021**
- Ruilong Li, PhD Student **09/2019 - 08/2021**
- Pengda Xiang, PhD Student **09/2018 - 08/2021**
- Sitao Xiang, PhD Student **09/2016 - 08/2021**
- Zimo Li, PhD Student **09/2016 - 08/2021**
- Shichen Liu, PhD Student **09/2018 - 07/2021**
- Zhengfei Kuang, PhD Student **09/2019 - 11/2020**
- Tianye Li, PhD Student (MSc in 2015) **11/2015 - 08/2021**
- Kyle Olszewski, PhD Student (PhD defense in 10/2020) **09/2014 - 11/2020**
- Zeng Huang, PhD Student (PhD defense in 08/2020) **09/2016 - 08/2020**
- Zhou Yi, PhD Student (PhD defense in 03/2020) **09/2016 - 05/2020**
- Shunsuke Saito, PhD Student (PhD defense in 12/2019) **09/2015 - 05/2020**
- Lingyu Wei, PhD Student (PhD defense in 03/2018) **09/2014 - 05/2018**

- Liwen Hu, PhD Student (MSc in 2013 and PhD defense in 11/2018) **09/2014 - 05/2019**
- Nitika Aggarwal, MSc Student **01/2014 - 05/2014**
- Ronald Yu, MSc Student **10/2016 - 05/2018**
- Carrie Sun, BSc Student **01/2014 - 05/2014**
- Lizhi Fan, BSc Student **01/2015 - 05/2015**
- Natalie Monger, BSc Student **09/2016 - 05/2017**
- Dr. Chongyang Ma, Postdoctoral Researcher **09/2013 - 06/2015**

USC Institute for Creative Technologies, Vision and Graphics Lab

- Kathleen Haase, Special Projects Manager **06/2016 - 06/2020**
- Yajie Zhao, Researcher Associate **10/2017 - 06/2020**
- Mingming He, Postdoctoral Researcher **12/2018 - 06/2020**
- Loc Huynh, PhD Student **08/2017 - 06/2020**
- Karl Bladin, Research Programmer **08/2017 - 06/2020**
- Pratusha Prasad, Research Programmer (MSc in 2016) **06/2016 - 06/2020**
- Xinglei Ren, Research Programmer (MSc in 2017) **04/2017 - 06/2020**
- Bipin Kishore, Research Programmer (MSc in 2017) **04/2017 - 06/2020**
- Chinmay Chinara, Research Programmer (MSc in 2018) **05/2018 - 06/2020**
- Aakash Shanbhag, Research Programmer (MSc in 2018) **05/2018 - 06/2020**
- Marcel Ramos, Digital Artist **06/2016 - 06/2020**
- Christina Trejo, Project Coordinator **06/2016 - 06/2020**
- Owen Ingraham, Digital Artist **07/2018 - 05/2020**
- Weikai Chen, Researcher Associate **06/2017 - 09/2019**
- Jun Xing, Postdoctoral Researcher **05/2017 - 01/2019**
- Andrew Jones, Sr. Research Associate **06/2016 - 01/2018**

Columbia University, Computer Science Department

- Nathaniel Clinger, BSc Student **01/2012 - 05/2012**
- Papoj Thamjaroenporn, BSc Student **01/2012 - 05/2012**
- Pei-Lun Hsieh, MSc Student **01/2012 - 05/2012**
- Xiaochen Hu, BSc Student **01/2012 - 05/2012**

EPFL, School of Computer and Communication Sciences

- Alexandru Ichim, MSc Student **06/2010 - 09/2010**

ETH Zurich, Department of Computer Science

- Huw Bowles, MSc Student **11/2008 - 05/2009**
- Jens Puwein, MSc Student **02/2008 - 08/2008**
- Jeroen Dries, MSc Student **09/2006 - 03/2007**

PhD Defense

- Egor Zakharov, *Skoltech* **04/2023**
- Zeng Huang, *University of Southern California* **08/2020**
- Yi Zhou, *University of Southern California* **03/2020**
- Shunsuke Saito, *University of Southern California* **12/2019**
- Jens Windau, *University of Southern California* **04/2019**
- Liwen Hu, *University of Southern California* **11/2018**
- Lingyu Wei, *University of Southern California* **03/2018**
- Yi Guo, *University of Southern California* **03/2017**
- Kai Chang, *University of Southern California* **02/2017**
- Srinath Sridhar, *Saarland University / Max Planck Institute for Informatics* **12/2016**
- Hongyi Xu, *University of Southern California* **11/2016**
- Morten Bojsen-Hansen, *IST Austria* **07/2016**
- Koki Nagano, *University of Southern California* **04/2016**
- Sema Berkiten, *Princeton University* **02/2016**
- Paul Graham, *University of Southern California* **05/2014**
- Zhuoliang Kang, *University of Southern California* **04/2014**

PhD Qualifying Committee

- Yuming Gu, *University of Southern California* **01/2025**
- Zimo Li, *University of Southern California* **04/2020**
- Zeng Huang, *University of Southern California* **03/2020**
- Yitao Hu, *University of Southern California* **02/2020**
- Yi Zhou, *University of Southern California* **01/2019**
- Loc Huynh, *University of Southern California* **05/2018**
- Weiyue Wang, *University of Southern California* **04/2018**
- Chloe Legendre, *University of Southern California* **03/2018**
- Lingyu Wei, *University of Southern California* **11/2017**
- Jens Windau, *University of Southern California* **11/2017**
- Yijing Li, *University of Southern California* **05/2017**
- Sean Mason, *University of Southern California* **03/2017**
- Soravit Changpinyo, *University of Southern California* **11/2016**
- Yi Guo, *University of Southern California* **12/2015**
- Inkyu Kim, *University of Southern California* **08/2016**
- Matthias Hernandez, *University of Southern California* **05/2016**
- Tran Tuan Anh, *University of Southern California* **04/2016**
- Arnav Aghaarwal, *University of Southern California* **04/2016**
- Kai Chang, *University of Southern California* **02/2016**
- Ruizhe Wang, *University of Southern California* **12/2015**
- Rongqi Qiu, *University of Southern California* **08/2015**
- Christian Potthast, *University of Southern California* **05/2015**
- Kai Chang, *University of Southern California* **05/2015**
- Guan Pang, *University of Southern California* **05/2014**
- Mohammad Abdel-Majeed, *University of Southern California* **03/2014**
- Paul Graham, *University of Southern California* **09/2013**
- Andrew Jones, *University of Southern California* **09/2013**
- Morten Bojsen-Hansen, *IST Austria* **07/2012**
- Breannan Smith, *Columbia University* **03/2012**

Outreach

Mohamed Bin Zayed University of Artificial Intelligence

- MBZUAI Undergraduate Program Counsellor's Weekend, SS 2025
- MBZUAI Undergraduate Program Candidate Weekend, SS 2025
- Meet the MBZUAI UG Faculty Webinar, SS 2025
- MBZUAI Winter Internship (VIP): Build Your Own LLM, FS 2024
- MBZUAI/ADEK Summer School 2024, SS 2024
- MBZUAI Graduate Program + Scholarship Opportunities in Artificial Intelligence, FS 2023
- MBZUAI Undergraduate Research Internship Program (UGRIP) 2023 (Best Presentation), Supervisor, SS 2023
- National Experts Program, Academic Mentor, SS 2023
- UAE Climate Tech 2023, MBZUAI Delegation, SS 2023
- MBZUAI Graduate Program + Scholarship Opportunities in Artificial Intelligence, SS 2023
- MBZUAI Graduate Program + Scholarship Opportunities in Artificial Intelligence, FS 2022

University of Southern California

- USC Viterbi EngX 2019 (ONR STEM)
- USC London Hackathon 2018
- USC Academic Career Mentoring Panel 2017
- USC Viterbi K-12 STEM: Coding and Animation (Screening and Panel) 2015

ACADEMIC SERVICES

Mohamed Bin Zayed University of Artificial Intelligence

- MBZUAI Undergraduate Program, SS 2025
- MBZUAI Faculty Council, SS 2025

- CV Faculty Search Committee, SS 2025
- MBZUAI Undergraduate Program, FS 2024
- MBZUAI Faculty Council, FS 2024
- CV Faculty Search Committee, SS 2024
- HCI Faculty Search Committee, SS 2024
- MBZUAI Data Observatory Task Force, SS 2023
- Student Admissions Committee, SS 2023
- HPC Advisory Committee, SS 2023
- PhD Courses Committee, SS 2023
- MBZUAI Commencement Task Force, FS 2022
- MBZUAI Data Observatory Task Force, FS 2022
- HCI Faculty Search Committee, FS 2022
- Robotics Faculty Search Committee, FS 2022
- Student Admissions Committee, FS 2022

University of Southern California, Computer Science Department

- Annual Faculty Merit Review Committee, SS 2020
- CS Department Faculty Search Committee, FS 2019
- CS Games Curriculum Revision Committee, FS 2019
- SCA IMGD / CSGames Faculty Joint Appointment Committee (Chair), FS 2019
- ICT MxR Director Search Committee, FS 2018
- SCA IMGD / CSGames Faculty Tenure Committee, FS 2018
- CS Department PhD Admissions Committee, FS 2018
- SCA IMGD / CSGames Faculty Search Committee, SS 2018
- CS Department PhD Admissions Committee, FS 2017
- Annual Faculty Merit Review Committee, SS 2017
- CS Department PhD Admissions Committee, FS 2016
- CS Department Faculty Search Committee, FS 2015
- CS Department PhD Admissions Committee, FS 2015
- CS Department Faculty Search Committee, FS 2014
- CS Department Transformative Committee, FS 2013
- Co-Chair of CS Department Colloquium Committee, FS 2013

CONSULTING

Abu Dhabi Executive Office	**11/2022 - ongoing**
The Washington Post	**05/2019 - ongoing**
American Scholastic Convention Research	**07/2021 - 11/2022**
Munger, Tolles & Olson LLP	**10/2018 - 02/2023**
Daignault Iyer LLP	**02/2021 - 03/2021**
Canadian Security Intelligence Service	**03/2021 - 05/2023**
Goldberg Segalla LLP	**05/2020 - 02/2021**
Huawei	**09/2015 - 09/2016**
LEIA, Inc.	**04/2015 - 10/2015**
L Squared Capital Partners	**03/2015 - 04/2015**
Oculus VR/Facebook	**08/2014 - 07/2015**
Embodee Corp.	**03/2014 - 05/2015**
Pelican Imaging	**02/2014 - 11-2016**
Innored, Inc.	**09/2013 - 01/2014**
Disney Research Zurich	**09/2013 - 09/2016**
Industrial Light & Magic, Lucasfilm Ltd.	**07/2013 - 06/2014**
The Jig Lab	**07/2013 - 05/2014**
Tuxedo Agency	**11/2012 - 11/2012**
Artec Group, Inc	**08/2011 - 12/2014**
3Gear Systems	**05/2011 - 04/2012**
XYZ RGB, Inc.	**07/2011 - 01/2012**

Max Planck Institute for Intelligent Systems	**05/2011 - 11/2011**
C-RAD AB	**08/2010 - 08/2011**
Mova LLC	**08/2010 - 10/2010**
Filmakademie Baden-Württemberg GmbH, Institute for Animation	**04/2010 - 07/2010**
Aguru Images, Inc.	**08/2008 - 07/2009**

RESEARCH GRANTS & GIFTS

Total Funding Awarded to PI: $20,766,470 where $3,039,000 for MBZUAI, $3,522,525 for USC, and $14,204,945 for USC/ICT.

University Funding for MBZUAI ($3,039,000)

Mohamed bin Zayed University of Artificial Intelligence
MBZUAI: Start-up Funding
Start Date: 05/10/2022
Award Amount: $840,000 to date ($280,000/year)
Role: PI (MBZUAI)

Mohamed bin Zayed University of Artificial Intelligence
MBZUAI: Metaverse Center Funding
Duration: 04/15/2024 - 12/31/2024
Award Amount: $197,000
Role: PI (MBZUAI)

Mohamed bin Zayed University of Artificial Intelligence
MBZUAI Research Office: Metaverse Center Funding
Duration: 02/21/2024 - 12/31/2024
Award Amount: $178,000
Role: PI (MBZUAI)

Mohamed bin Zayed University of Artificial Intelligence
MBZUAI Research Office: Meta Wall
Duration: 09/15/2023 - 12/15/2023
Award Amount: $1,307,000
Role: PI (MBZUAI)

Mohamed bin Zayed University of Artificial Intelligence
MBZUAI Research Office: Metaverse Center Funding
Start Date: 08/01/2023 - 01/31/2024
Award Amount: $517,000
Role: PI (MBZUAI)

Federal Funding for USC and USC/ICT ($12,017,745)

Army Research Office (ARO)
RTO: Diverse Crowd Generation at Scale with Lifelike Faces
Duration: 06/01/2020 - 05/31/2021
Award Amount: $189,000
Role: PI (USC/ICT)

Army Research Office (ARO)
UARC 6.1: AI-Driven 3D Shape and Motion Synthesis
Duration: 11/01/2019 - 10/31/2021
Award Amount: $2,636,190
Role: PI (USC/ICT)

Army Research Office (ARO)
RTO: Real-Time Dynamic Occlusion Handling for RGB-Based Augmented Reality
Duration: 11/01/2019 - 10/31/2020
Award Amount: $200,000
Role: PI (USC/ICT)

U.S. Army Natick (NATICK)
Virtual Reality Testbed
Duration: 08/06/2019 I - 12/06/2019
Award Amount: $100,500
Role: PI (USC/ICT)

Central Intelligence Agency (CIA)
Project Nexus: Lifelike Digital Human Replica
Duration: 09/01/2018 - 08/31/2019
Award Amount: $1,000,000
Role: PI (USC/ICT)

Army Research Office (ARO)
RTO: Scalable and Efficient Light Stage Pipeline for High-Fidelity Face Digitization
Duration: 09/01/2018 - 08/31/2019
Award Amount: $200,000
Role: PI (USC/ICT)

U.S. Army Natick (NATICK)
High-Fidelity Rigging and Shading of Virtual Soldiers
Duration: 09/01/2018 - 03/31/2019
Award Amount: $157,500
Role: PI (USC/ICT)

Office of Naval Research (ONR - HPTE)
Young Investigator Program (YIP): Complete Human Digitization and Unconstrained Performance Capture
Duration: 06/01/2018 - 05/31/2021
Award Amount: $591,509
Role: PI (USC)

Semiconductor Research Corporation (SRC) / Defense Advanced Research Projects Agency (DARPA)
JUMP: Computing On Network Infrastructure for Pervasive, Cognition, and Action
Duration: 01/01/2018 - 12/31/2022
Award Amount: $1,174,818
Role: PI (USC)

Army Research Office (ARO)
UARC 6.1/6.2: Avatar Digitization & Immersive Communication Using Deep Learning
Duration: 11/01/2017 - 10/31/2019
Award Amount: $2,821,000
Role: PI (USC/ICT)

Army Research Office (ARO)
RTO: Strip-Based Hair Modeling Using Virtual Reality
Duration: 11/01/2017 - 10/31/2018
Award Amount: $250,000
Role: PI (USC/ICT)

Army Research Office (ARO)
RTO: Head-Mounted Facial Capture & Rendering for Augmented Reality
Duration: 11/01/2017 - 10/31/2018
Award Amount: $200,000
Role: PI (USC/ICT)

Army Research Office (ARO)
UARC 6.1/6.2: Capture, Rendering, & Display for Virtual Humans
Duration: 11/01/2016 - 10/31/2017
Award Amount: $1,408,011
Role: Project Lead (USC/ICT)

United States SHARP Academy (ARO)
Digital SHARP Survivor
Duration: 07/01/2016 - 06/31/2017
Award Amount: $94,953
Role: PI (USC/ICT)

Army Research Office (ARO)
RTO: Lighting Reproduction for RGB Camouflage
Duration: 01/01/2016 - 12/31/2017
Award Amount: $200,000
Role: PI (USC/ICT)

U.S. Army Natick (NATICK)
Research Contract
Duration: 09/01/2015 - 12/31/2016
Award Amount: $145,000
Role: PI (USC/ICT)

Office of Naval Research (ONR)
Markerless Performance Capture for Automated Functional Movement Screening
Duration: 08/01/2015 - 09/30/2017
Award Amount: $230,000
Role: PI (USC)

Intelligence Advanced Research Projects Activity (IARPA), Department of Defense (DoD)
GLAIVE: Graphics and Learning Aided Vision Engine for Janus
Duration: 07/25/2014 - 07/24/2018
Award Amount: $419,264
Role: Co-PI (USC)

Industry Funding for USC and USC/ICT ($4,121,561)

Facebook
Facebook Award
Date: 02/25/2020
Award Amount: $10,000
Role: PI (USC)

Sony Corporation
Light Stage Processing Research
Duration: 10/01/2019 - 09/30/2020
Award Amount: $200,000
Role: PI (USC/ICT)

Toppan Printing Co., Ltd.
Research Contract
Duration: 10/01/2019 - 09/30/2020
Award Amount: $697,150
Role: PI (USC/ICT)

Engility Corporation
Mystique
Date: 06/01/2019 - 08/31-2019
Award Amount: $68,473
Role: PI (USC/ICT)

Adobe Systems Inc.
Research Gift Donation
Date: 28/02/2019
Award Amount: $5,000
Role: PI (USC)

Softbank Corp.
3D Modeled, Rigged, and Animated Characters from 2D Video
Duration: 01/01/2019 - 01/01/2020
Award Amount: $111,534
Role: Co-PI (USC)

Snap Inc.
Research Gift Donation
Date: 10/29/2018
Award Amount: $20,000
Role: PI (USC)

TOEI Company, Ltd.
Research Contract
Duration: 06/01/2018 - 03/01/2019
Award Amount: $580,000
Role: PI (USC/ICT)

Lightstage, LLC / Otoy
Research Contract
Duration: 05/15/2018 - 12/31/2018
Award Amount: $152,000
Role: PI (USC/ICT)

Sony Corporation
Highly Sparse Volumetric Capture Using Deep Learning
Duration: 05/01/2018 - 04/31/2019
Award Amount: $120,000
Role: PI (USC)

Sony Corporation
Geometry and Appearance Synthesis for 3D Human Performance Capture
Duration: 05/01/2017 - 04/31/2018
Award Amount: $120,000
Role: PI (USC)

Adobe Systems Inc.
Research Gift Donation
Date: 08/09/2017
Award Amount: $20,000
Role: PI (USC)

Mediafront Inc.
Research Contract
Date: 06/28/2017
Award Amount: $38,095
Role: PI (USC/ICT)

Activision Publishing Inc.
Research Contract
Date: 05/09/2017
Award Amount: $21,593
Role: PI (USC/ICT)

Electronic Arts Inc.
Research Contract
Duration: 12/01/2016 - 12/01/2018
Award Amount: $460,000
Role: PI (USC/ICT)

SOOVII Digital Media Technology, Ltd
Research Contract
Date: 11/01/2016
Award Amount: $1,080,000
Role: PI (USC/ICT)

RL Leaders, LLC
Research Contract
Date: 10/01/2016
Award Amount: $630,216
Role: PI (USC/ICT)

Sony Corporation
Shape and Reflectance Estimation via Polarization Analysis
Duration: 08/12/2016 - 08/23/2017
Award Amount: $50,000
Role: PI (USC/ICT)

Adobe Systems Inc.
Research Gift Donation
Date: 01/07/2016
Award Amount: $10,000
Role: PI (USC)

Sony Corporation
Unconstrained Dynamic Shape Capture
Duration: 11/01/2015 - 10/31/2016
Award Amount: $123,500
Role: PI (USC)

Facebook / Oculus
Facebook Award
Date: 10/14/2015
Award Amount: $25,000
Role: PI (USC)

Huawei
Development of a 3D Hair Database
Date: 09/01/2015
Award Amount: $50,000
Role: PI (USC)

Okawa Foundation
Okawa Foundation Award
Date: 10/08/2015
Award Amount: $10,000
Role: PI (USC)

Adobe Systems Inc.
Research Gift Donation
Date: 04/27/2015
Award Amount: $9,000
Role: PI (USC)

Embodee Corporation
Research Gift Donation
Date: 03/17/2015
Award Amount: $70,000
Role: PI (USC)

Google
Google Faculty Research Award: Data-Driven Framework for Unified Face and Hair Digitization
Date: 02/12/2015
Award Amount: $52,000
Role: PI (USC)

Facebook / Oculus
Facebook Award
Date: 02/03/2015
Award Amount: $25,000
Role: PI (USC)

Panasonic Corporation
Markerless Real-Time Facial Performance Capture
Date: 09/22/2014
Award Amount: $20,000
Role: PI (USC)

Pelican Imaging Corporation
Research Gift Donation
Date: 07/22/2014
Award Amount: $50,000
Role: PI (USC)

Innored Inc.
Research Gift Donation
Date: 11/01/2013
Award Amount: $25,000
Role: PI (USC)

University Funding for USC and USC/ICT ($856,166)

USC Shoah Foundation Institute
New Dimensions in Testimony
Duration: 05/01/2016 - 09/31/2017
Award Amount: $625,266
Role: PI (USC/ICT)

University of Southern California
Andrew and Erna Viterbi Early Career Chair
Start Date: 08/16/2015
Award Amount: $20,000 (to date)
Role: PI (USC)

University of Southern California - Integrated Media System Center (IMSC)
IMSC Award
Duration: 07/01/2013 - 06/30/2014
Award Amount: $11,000
Role: PI (USC)

University of Southern California
USC Start-up Funding
Start Date: 09/01/2013
Award Amount: $199,900
Role: PI (USC)

AWARDS & HONORS

MBZUAI IEC Innovation Grant (Growth Grant)	**12/2023**
Best Los Angeles Companies and Startups 2021 by BestStartup.us	**07/2021**
Welp Magazine Top 10 Virtual Reality Companies in Los Angeles (2021)	**02/2021**
Epic MegaGrants Recipient	**12/2020**
ACM SIGGRAPH 2020 Real-Time Live! “Best in Show” Award	**08/2020**
AMiner 2020 AI2000 Most Influential Scholar (Honorable Mention in Computer Graphics)	**04/2020**
DARPA Information Science and Technology (ISAT) Study Group Member	**06/2019**
Office of Naval Research (ONR) Young Investigator Program (YIP) Award	**02/2018**
USC Stevens Commercialization Award	**05/2017**
Microsoft Academic Top 10 Leaderboard in the past 5 years in Computer Graphics (ranking #1)	**05/2016**
World Technology Award Fellow	**10/2015**
Andrew and Erna Viterbi Early Career Chair	**10/2015**
Okawa Foundation Research Grant	**09/2015**
Google Faculty Research Award	**02/2015**
C-Suite Quaterly NextGen 10: Innovators under 40	**01/2014**
World’s top 35 innovator under 35 by MIT Technology Review	**08/2013**
Swiss National Science Foundation fellowship for prospective researchers	**03/2011**
ACM Symposium on Computer Animation Best Paper Award ’09	**08/2009**
National Science Foundation 3DPVT ’06 Student Travel Stipend	**05/2006**
German Academic Exchange Service (DAAD) fellowship	**01/2006**
Karl-Steinbuch scholarship of the MFG Baden-Württemberg	**10/2005**

Thomas Gessmann-Stiftung fellowship, German Science Foundation	**09/2004**
Baden-Württemberg scholarship of the Markel Foundation	**10/2004**
Scholarship of the Richard Winter foundation	**09/2004**
ERASMUS scholarship	**10/2002**
E-fellows scholarship	**11/2001**

PEER-REVIEWED JOURNAL & CONFERENCE PAPERS

[83] SOAP: STYLE-OMNISCIENT ANIMATABLE PORTRAITS
Tingting Liao, Yujian Zheng, Adilbek Karmanov, Liwen Hu, Leyang Jin, Yuliang Xiu, Hao Li
ACM Transactions on Graphics, Proceedings of the 52nd ACM SIGGRAPH Conference and Exhibition 2025, (SIGGRAPH 2025), 08/2025

[82] SINGLE-VIEW GARMENT RECONSTRUCTION USING DIFFUSION MAPPING VIA PATTERN COORDINATES
Ren Li, Cong Cao, Corentin Dumery Yingxuan You, Hao Li, Pascal Fua
ACM Transactions on Graphics, Proceedings of the 52nd ACM SIGGRAPH Conference and Exhibition 2025, (SIGGRAPH 2025), 08/2025

[81] DIFFPORTRAIT360: CONSISTENT PORTRAIT DIFFUSION FOR 360 VIEW SYNTHESIS
Yuming Gu, Phong Tran, Yujian Zheng, Hongyi Xu, Heyuan Li, Adilbek Karmanov, Hao Li
Proceedings of the 38th IEEE International Conference on Computer Vision and Pattern Recognition 2025, (CVPR 2025), 06/2025

[80] VOODOO XP: EXPRESSIVE ONE-SHOT HEAD REENACTMENT FOR VR TELEPRESENCE
Phong Tran, Egor Zakharov, Long-Nhat Ho, Liwen Hu, Adilbek Karmanov, Aviral Agarwal, McLean Goldwhite, Ariana Bermudez Venegas, Anh Tuan Tran, Hao Li
ACM Transactions on Graphics, Proceedings of the 17th ACM SIGGRAPH Conference and Exhibition in Asia 2024, (SIGGRAPH Asia 2024), 12/2024

[79] STTATTS: UNIFIED SPEECH-TO-TEXT AND TEXT-TO-SPEECH MODEL
Hawau Olamide Toyin, Hao Li, Hanan Aldarmaki
Proceedings of the 2024 Conference on Empirical Methods in Natural Language Processing, (EMNLP 2024), 11/2024

[78] VOODOO 3D: VOLUMETRIC PORTRAIT DISENTANGLEMENT FOR ONE SHOT HEAD REENACTMENT
Phong Tran, Egor Zakharov, Long-Nhat Ho, Anh Tuan Tran, Liwen Hu, Hao Li
Proceedings of the 37th IEEE International Conference on Computer Vision and Pattern Recognition 2024, (CVPR 2024), 06/2024

[77] XMEM++: PRODUCTION-LEVEL VIDEO SEGMENTATION FROM FEW ANNOTATED FRAMES
Maksym Bekuzarov, Ariana Bermudez, Joon-Young Lee, Hao Li
Proceedings of the IEEE International Conference on Computer Vision 2023, (ICCV 2023), 10/2023

[76] WATCH THOSE WORDS: VIDEO FALSIFICATION DETECTION USING WORD-CONDITIONED FACIAL MOTION
Shruti Agarwal, Liwen Hu, Evonne Ng, Trevor Darrell, Hao Li, Anna Rohrbach
Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision 2023, (WACV 2023), 01/2023

[75] LEARNING TO LISTEN: MODELING NON-DETERMINISTIC DYADIC FACIAL MOTION
Evonne Ng, Hanbyul Joo, Liwen Hu, Hao Li, Trevor Darrell, Angjoo Kanazawa, Shiry Ginosar
Proceedings of the 35th IEEE International Conference on Computer Vision and Pattern Recognition 2022, (CVPR 2022), 06/2022

[74] TASK-GENERIC HIERARCHICAL HUMAN MOTION PRIOR USING VAES
Jiaman Li, Ruben Villegas, Duygu Ceylan, Jimei Yang, Zhengfei Kuang, Hao Li, Yajie Zhao
Proceedings of the 9th International Conference on 3D Vision 2021,
(3DV 2021), 12/2021

[73] PLENOCTREES FOR REAL-TIME RENDERING OF NEURAL RADIANCE FIELDS
Alex Yu, Ruilong Li, Matthew Tancik, Hao Li, Ren Ng, Angjoo Kanazawa
Proceedings of the IEEE International Conference on Computer Vision 2021,
(ICCV 2021 Oral Presentation), 10/2021

[72] TOPOLOGICALLY CONSISTENT MULTI-VIEW FACE INFERENCE USING VOLUMETRIC SAMPLING
Tianye Li, Shichen Liu, Timo Bolkart, Jiayi Liu, Hao Li, Yajie Zhao
Proceedings of the IEEE International Conference on Computer Vision 2021,
(ICCV 2021 Oral Presentation), 10/2021

[71] DISUNKNOWN: DISTILLING UNKNOWN FACTORS FOR DISENTANGLEMENT LEARNING
Sitao Xiang, Yuming Gu, Pengda Xiang, Menglei Chai, Hao Li, Yajie Zhao, Mingming He
Proceedings of the IEEE International Conference on Computer Vision 2021,
(ICCV 2021), 10/2021

[70] NORMALIZED AVATAR SYNTHESIS USING STYLEGAN AND PERCEPTUAL REFINEMENT
Huiwen Luo, Liwen Hu, Koki Nagano, Zejian Wang, Han-Wei Kung, Qingguo Xu, Lingyu Wei, Hao Li
Proceedings of the 34th IEEE International Conference on Computer Vision and Pattern Recognition 2021,
(CVPR 2021), 06/2021

[69] EQUIVARIANT POINT NETWORK FOR 3D POINT CLOUD ANALYSIS
Haiwei Chen, Shichen Liu, Weikai Chen, Hao Li
Proceedings of the 34th IEEE International Conference on Computer Vision and Pattern Recognition 2021,
(CVPR 2021), 06/2021

[68] FULLY CONVOLUTIONAL MESH AUTOENCODER USING EFFICIENT SPATIALLY VARYING KERNELS
Yi Zhou, Chenglei Wu, Zimo Li, Chen Cao, Yuting Ye, Jason Saragih, Hao Li, Yaser Sheikh
Proceedings of the 34th Conference on Neural Information Processing Systems 2020,
(NeurIPS 2020), 12/2020

[67] DYNAMIC FACIAL ASSET AND RIG GENERATION FROM A SINGLE SCAN
Jiaman Li, Zhengfei Kuang, Yajie Zhao, Mingming He, Karl Bladin, Hao Li
ACM Transactions on Graphics, Proceedings of the 13th ACM SIGGRAPH Conference and Exhibition in Asia 2020,
(SIGGRAPH Asia 2020), 11/2020

[66] MONOCULAR REAL-TIME VOLUMETRIC PERFORMANCE CAPTURE
Ruilong Li, Yuliang Xiu, Shunsuke Saito, Zeng Huang, Kyle Olszewski, Hao Li
Proceedings of the 16th European Conference on Computer Vision 2020,
(ECCV 2020), 08/2020

[65] A GENERAL DIFFERENTIABLE MESH RENDERER FOR IMAGE-BASED 3D REASONING
Shichen Liu, Tianye Li, Weikai Chen, Hao Li
IEEE Transaction on Pattern Analysis and Machine Intelligence 2020,
(PAMI 2020), 7/2020

[64] LEARNING FORMATION OF PHYSICALLY-BASED FACE ATTRIBUTES
Ruilong Li, Karl Bladin, Yajie Zhao, Chinmay Chinara, Owen Ingraham, Pengda Xiang, Xinglei Ren, Pratusha Prasad, Bipin Kishore, Jun Xing, Hao Li
Proceedings of the 33rd IEEE International Conference on Computer Vision and Pattern Recognition 2020,
(CVPR 2020), 06/2020

[63] INTUITIVE, INTERACTIVE BEARD AND HAIR SYNTHESIS WITH GENERATIVE MODELS
Kyle Olszewski, Duygu Ceylan, Jun Xing, Jose I. Echevarria, Zhili Chen, Weikai Chen, Hao Li
Proceedings of the 33rd IEEE International Conference on Computer Vision and Pattern Recognition 2020, (CVPR 2020 Oral Presentation), 06/2020

[62] ARCH: ANIMATABLE RECONSTRUCTION OF CLOTHED HUMANS
Zeng Huang, Yuanlu Xu, Christoph Lassner, Hao Li, Tony Tung
Proceedings of the 33rd IEEE International Conference on Computer Vision and Pattern Recognition 2020, (CVPR 2020), 06/2020

[61] LEARNING TO INFER IMPLICIT SURFACES WITHOUT 3D SUPERVISION
Shichen Liu, Shunsuke Saito, Weikai Chen, Hao Li
Proceedings of the 33rd Conference on Neural Information Processing Systems 2019, (NeurIPS 2019), 12/2019

[60] DEEP FACE NORMALIZATION
Koki Nagano, Huiwen Luo, Zejian Wang, Jaewoo Seo, Jun Xing, Liwen Hu, Lingyu Wei, Hao Li
ACM Transactions on Graphics, Proceedings of the 12th ACM SIGGRAPH Conference and Exhibition in Asia 2019, (SIGGRAPH Asia 2019), 11/2019

[59] SOFTRASTERIZER: DIFFERENTIABLE RENDERING FOR IMAGE-BASED 3D REASONING
Shichen Liu, Tianye Li, Weikai Chen, Hao Li
Proceedings of the IEEE International Conference on Computer Vision 2019, (ICCV 2019 Oral Presentation), 10/2019

[58] PIFU: PIXEL-ALIGNED IMPLICIT FUNCTION FOR HIGH-RESOLUTION CLOTHED HUMAN DIGITIZATION
Shunsuke Saito, Zeng Huang, Ryota Natsume, Shigeo Morishima, Angjoo Kanazawa, Hao Li
Proceedings of the IEEE International Conference on Computer Vision 2019, (ICCV 2019), 10/2019

[57] LEARNING PERSPECTIVE UNDISTORTION OF PORTRAITS
Yajie Zhao, Zeng Huang, Tianye Li, Weikai Chen, Chloe LeGendre, Xinglei Ren, Jun Xing, Ari Shapiro, Hao Li
Proceedings of the IEEE International Conference on Computer Vision 2019, (ICCV 2019 Oral Presentation), 10/2019

[56] TRANSFORMABLE BOTTLENECK NETWORKS
Kyle Olszewski, Sergey Tulyakov, Oliver Woodford, Hao Li, Linjie Luo
Proceedings of the IEEE International Conference on Computer Vision 2019, (ICCV 2019 Oral Presentation), 10/2019

[55] HAIRBRUSH FOR IMMERSIVE DATA-DRIVEN HAIR MODELING
Jun Xing, Koki Nagano, Weikai Chen, Haotian Xu, Li-Yi Wei, Yajie Zhao, Jingwan Lu, Byungmoon Kim, Hao Li
Proceedings of the 32nd ACM User Interface Software and Technology Symposium 2019, (UIST 2019), 10/2019

[54] PROTECTING WORLD LEADERS AGAINST DEEP FAKES
Shruti Agarwal, Hany Farid, Yuming Gu, Mingming He, Koki Nagano, Hao Li
IEEE International Conference on Computer Vision and Pattern Recognition 2019 Workshop on Media Forensics, (CVPR 2019 Workshops), 06/2019

[53] SICLOPE: SILHOUETTE-BASED CLOTHED PEOPLE
Ryota Natsume, Shunsuke Saito, Zeng Huang, Weikai Chen, Chongyang Ma, Hao Li, Shigeo Morishima
Proceedings of the 32nd IEEE International Conference on Computer Vision and Pattern Recognition 2019, (CVPR 2019 Oral Presentation - Best Paper Award Finalist), 06/2019

[52] ON THE CONTINUITY OF ROTATION REPRESENTATION IN NEURAL NETWORKS
Yi Zhou, Connelly Barnes, Jingwan Lu, Jimei Yang, Hao Li
Proceedings of the 32nd IEEE International Conference on Computer Vision and Pattern Recognition 2019, (CVPR 2019), 06/2019

[51] PAGAN: REAL-TIME AVATARS USING DYNAMIC TEXTURES
Koki Nagano, Jaewoo Seo, Jun Xing, Lingyu Wei, Zimo Li, Shunsuke Saito, Aviral Agarwal, Jens Fursund, Hao Li
ACM Transactions on Graphics, Proceedings of the 11th ACM SIGGRAPH Conference and Exhibition in Asia 2018, (SIGGRAPH Asia 2018), 12/2018

[50] 3D HAIR SYNTHESIS USING VOLUMETRIC VARIATIONAL AUTOENCODERS
Shunsuke Saito, Liwen Hu, Chongyang Ma, Hikaru Ibayashi, Linjie Luo, Hao Li
ACM Transactions on Graphics, Proceedings of the 11th ACM SIGGRAPH Conference and Exhibition in Asia 2018, (SIGGRAPH Asia 2018), 12/2018

[49] REAL-TIME HAIR RENDERING USING SEQUENTIAL ADVERSARIAL NETWORKS
Lingyu Wei, Liwen Hu, Vladimir Kim, Ersin Yumer, Hao Li
Proceedings of the 15th European Conference on Computer Vision 2018, (ECCV 2018), 09/2018

[48] HAIRNET: SINGLE-VIEW HAIR RECONSTRUCTION USING CONVOLUTIONAL NEURAL NETWORKS
Yi Zhou, Liwen Hu, Jun Xing, Weikai Chen, Han-Wei Kung, Xin Tong, Hao Li
Proceedings of the 15th European Conference on Computer Vision 2018, (ECCV 2018), 09/2018

[47] DEEP VOLUMETRIC VIDEO FROM VERY SPARSE MULTI-VIEW PERFORMANCE CAPTURE
Zeng Huang, Tianye Li, Weikai Chen, Yajie Zhao, Jun Xing, Chloe LeGendre, Linjie Luo, Chongyang Ma, Hao Li
Proceedings of the 15th European Conference on Computer Vision 2018, (ECCV 2018), 09/2018

[46] HYBRID FUSION: REAL-TIME PERFORMANCE CAPTURE USING A SINGLE DEPTH SENSOR AND SPARSE IMUS
Zerong Zheng, Tao Yu, Hao Li, Kaiwen Guo, Qionghai Dai, Lu Fang, Yebin Liu
Proceedings of the 15th European Conference on Computer Vision 2018, (ECCV 2018), 09/2018

[45] CONTEXTUAL-BASED IMAGE INPAINTING: INFER, MATCH, AND TRANSLATE
Yuhang Song, Chao Yang, Zhe Lin, Xiaofeng Liu, Qin Huang, Hao Li, C.-C. Jay Kuo
Proceedings of the 15th European Conference on Computer Vision 2018, (ECCV 2018), 09/2018

[44] HIGH-FIDELITY FACIAL REFLECTANCE AND GEOMETRY INFERENCE FROM AN UNCONSTRAINED IMAGE
Shugo Yamaguchi, Shunsuke Saito, Koki Nagano, Yajie Zhao, Weikai Chen, Kyle Olszewski, Shigeo Morishima, Hao Li
ACM Transactions on Graphics, Proceedings of the 45th ACM SIGGRAPH Conference and Exhibition 2018, (SIGGRAPH 2018), 08/2018

[43] MESOSCOPIC FACIAL GEOMETRY INFERENCE USING DEEP NEURAL NETWORKS
Loc Huynh, Weikai Chen, Shunsuke Saito, Jun Xing, Koki Nagano, Andrew Jones, Paul Debevec, Hao Li
Proceedings of the 31st IEEE International Conference on Computer Vision and Pattern Recognition 2018, (CVPR 2018 Spotlight Presentation), 06/2018

[42] DOUBLE FUSION: REAL-TIME CAPTURE OF HUMAN PERFORMANCES WITH INNER BODY SHAPES FROM A SINGLE DEPTH SENSOR
Tao Yu, Zerong Zheng, Kaiwen Guo, Jianhui Zhao, Qionghai Dai, Hao Li, Gerard Pons-Moll, Yebin Liu
Proceedings of the 31st IEEE International Conference on Computer Vision and Pattern Recognition 2018, (CVPR 2018 Oral Presentation), 06/2018

[41] AUTO-CONDITIONED RECURRENT NETWORKS FOR EXTENDED COMPLEX HUMAN MOTION SYNTHESIS
Zimo Li, Yi Zhou, Shuangjio Xiao, Chong He, Zeng Huang, Hao Li
Proceedings of the Sixth International Conference on Learning Representations 2018, arXiv:1707.05363, (ICLR 2018), 04/2018

[40] AVATAR DIGITIZATION FROM A SINGLE IMAGE FOR REAL-TIME RENDERING
Liwen Hu, Shunsuke Saito, Lingyu Wei, Koki Nagano, Jaewoo Seo, Jens Fursund, Iman Sadeghi, Carrie Sun, Yen-Chun Chen, Hao Li
ACM Transactions on Graphics, Proceedings of the 10th ACM SIGGRAPH Conference and Exhibition in Asia 2017, (SIGGRAPH Asia 2017), 11/2017

[39] LEARNING A MODEL OF FACIAL SHAPE AND EXPRESSION FROM 4D SCANS
Tianye Li, Timo Bolkart, Michael J. Black, Hao Li, Javier Romero
ACM Transactions on Graphics, Proceedings of the 10th ACM SIGGRAPH Conference and Exhibition in Asia 2017, (SIGGRAPH Asia 2017), 11/2017

[38] LEARNING DENSE FACIAL CORRESPONDENCES IN UNCONSTRAINED IMAGES
Ronald Yu, Shunsuke Saito, Haoxiang Li, Duygu Ceylan, Hao Li
Proceedings of the IEEE International Conference on Computer Vision 2017, (ICCV 2017), 10/2017

[37] REALISTIC DYNAMIC FACIAL TEXTURES FROM A SINGLE IMAGE USING GANS
Kyle Olszewski, Zimo Li, Chao Yang, Yi Zhou, Ronald Yu, Zeng Huang, Sitao Xiang, Shunsuke Saito, Pushmeet Kohli, Hao Li
Proceedings of the IEEE International Conference on Computer Vision 2017, (ICCV 2017), 10/2017

[36] PRODUCTION-LEVEL FACIAL PERFORMANCE CAPTURE USING DEEP CONVOLUTIONAL NEURAL NET-WORKS
Samuli Laine, Tero Karras, Timo Aila, Antti Herva, Shunsuke Saito, Ronald Yu, Hao Li, Jaakko Lehtinen
Proceedings of the 16th ACM SIGGRAPH / Eurographics Symposium on Computer Animation 2017, arXiv:1609.06536, (SCA 2017), 07/2017

[35] PHOTOREALISTIC FACIAL TEXTURE INFERENCE USING DEEP NEURAL NETWORKS
Shunsuke Saito, Lingyu Wei, Liwen Hu, Koki Nagano, Hao Li
Proceedings of the 30th IEEE International Conference on Computer Vision and Pattern Recognition 2017, arXiv:1612.00523, (CVPR 2017 Spotlight Presentation), 07/2017

[34] HIGH-RESOLUTION IMAGE INPAINTING USING MULTI-SCALE NEURAL PATCH SYNTHESIS
Chao Yang, Xin Lu, Zhe Lin, Eli Shechtman, Oliver Wang, Hao Li
Proceedings of the 30th IEEE International Conference on Computer Vision and Pattern Recognition 2017, arXiv:1611.09969, (CVPR 2017), 07/2017

[33] SIMULATION-READY HAIR CAPTURE
Liwen Hu, Derek Bradley, Hao Li, Thabo Beeler
Computer Graphics Forum 36(2), Proceedings of the 38th Annual Conference of the European Association for Computer Graphics 2017, (Eurographics 2017), 04/2017

[32] MULTI-VIEW STEREO ON CONSISTENT FACE TOPOLOGY
Graham Fyffe, Koki Nagano, Loc Huynh, Shunsuke Saito, Jay Bush, Andrew Jones, Hao Li, Paul Debevec
Computer Graphics Forum 36(2), Proceedings of the 38th Annual Conference of the European Association for Computer Graphics 2017,
(Eurographics 2017), 04/2017

[31] LEARNING DETAIL TRANSFER BASED ON GEOMETRIC FEATURES
Sema Berkiten, Maciej Halber, Justin Solomon, Chongyang Ma, Hao Li, Szymon Rusinkiewicz
Computer Graphics Forum 36(2), Proceedings of the 38th Annual Conference of the European Association for Computer Graphics 2017,
(Eurographics 2017), 04/2017

[30] HIGH-FIDELITY FACIAL AND SPEECH ANIMATION FOR VR HMDS
Kyle Olszewski, Joseph J. Lim, Shunsuke Saito, Hao Li
ACM Transactions on Graphics, Proceedings of the 9th ACM SIGGRAPH Conference and Exhibition in Asia 2016,
(SIGGRAPH Asia 2016), 12/2016

[29] REAL-TIME FACIAL SEGMENTATION AND PERFORMANCE CAPTURE FROM RGB INPUT
Shunsuke Saito, Tianye Li, Hao Li
Proceedings of the 14th European Conference on Computer Vision 2016, arXiv:1604.02801
(ECCV 2016), 10/2016

[28] CAPTURING DYNAMIC TEXTURED SURFACES OF MOVING TARGETS
Ruizhe Wang, Lingyu Wei, Etienne Vouga, Qixing Huang, Duygu Ceylan, Gerard Medioni, Hao Li
Proceedings of the 14th European Conference on Computer Vision 2016, arXiv:1604.02801
(ECCV 2016 Spotlight Presentation), 10/2016

[27] DENSE HUMAN BODY CORRESPONDENCES USING CONVOLUTIONAL NETWORKS
Lingyu Wei, Qixing Huang, Duygu Ceylan, Etienne Vouga, Hao Li
Proceedings of the 29th IEEE International Conference on Computer Vision and Pattern Recognition 2016, arXiv:1511.05904
(CVPR 2016 Oral Presentation), 06/2016

[26] RAPID PHOTOREALISTIC BLENDSHAPE MODELING FROM RGB-D SENSORS
Dan Casas, Andrew Feng, Oleg Alexander, Graham Fyffe, Paul Debevec, Ryosuke Ichikari, Hao Li, Kyle Olszewski, Evan Suma, Ari Shapiro
Computer Animation and Virtual Worlds 2016, Proceedings of the 29th Conference on Computer Animation and Social Agents,
(CASA 2016), 05/2016

[25] PATIENT-SPECIFIC ASSESSMENT OF DYSMORPHISM OF THE FEMORAL HEAD-NECK JUNCTION: A STATISTICAL SHAPE MODEL APPROACH
Vikas Khanduja, Nick Baelde, Andreas Dobbelaere, Jan Van Houcke, Hao Li, Christophe Pattyn, Emmanuel A. Audenaert
The International Journal of Medical Robotics and Computer Assisted Surgery 2015,
(MRCAS 2015), 12/2015

[24] FACIAL PERFORMANCE SENSING HEAD-MOUNTED DISPLAY
Hao Li, Laura Trutoiu, Kyle Olszewski, Lingyu Wei, Tristan Trutna, Pei-Lun Hsieh, Aaron Nicholls, Chongyang Ma
ACM Transactions on Graphics, Proceedings of the 42nd ACM SIGGRAPH Conference and Exhibition 2015,
(SIGGRAPH 2015), 08/2015

[23] SINGLE-VIEW HAIR MODELING USING A HAIRSTYLE DATABASE
Liwen Hu, Chongyang Ma, Linjie Luo, Hao Li
ACM Transactions on Graphics, Proceedings of the 42nd ACM SIGGRAPH Conference and Exhibition 2015,
(SIGGRAPH 2015), 08/2015

[22] SKIN MICROSTRUCTURE DEFORMATION WITH DISPLACEMENT MAP CONVOLUTION
Koki Nagano, Graham Fyffe, Oleg Alexander, Jernej Barbič, Hao Li, Abhijeet Ghosh, Paul Debevec
ACM Transactions on Graphics, Proceedings of the 42nd ACM SIGGRAPH Conference and Exhibition 2015, (SIGGRAPH 2015), 08/2015

[21] UNCONSTRAINED REALTIME FACIAL PERFORMANCE CAPTURE
Pei-Lun Hsieh, Chongyang Ma, Jihun Yu, Hao Li
Proceedings of the 28th IEEE International Conference on Computer Vision and Pattern Recognition 2015, (CVPR 2015), 06/2015

[20] CAPTURING BRAIDED HAIRSTYLES
Liwen Hu, Chongyang Ma, Linjie Luo, Li-Yi Wei, Hao Li
ACM Transactions on Graphics, Proceedings of the 7th ACM SIGGRAPH Conference and Exhibition in Asia 2014, (SIGGRAPH Asia 2014), 12/2014

[19] ROBUST HAIR CAPTURE USING SIMULATED EXAMPLES
Liwen Hu, Chongyang Ma, Linjie Luo, Hao Li
ACM Transactions on Graphics, Proceedings of the 41st ACM SIGGRAPH Conference and Exhibition 2014, (SIGGRAPH 2014), 08/2014

[18] RAPID AVATAR CAPTURE AND SIMULATION USING COMMODITY DEPTH SENSORS
Ari Shapiro, Andrew Feng, Ruizhe Wang, Hao Li, Mark Bolas, Gerard Medioni, Evan Suma
Computer Animation and Virtual Worlds 2014, Proceedings of the 27th Conference on Computer Animation and Social Agents, (CASA 2014), 05/2014

[17] DEPTH SENSOR-BASED REALTIME TUMOR TRACKING FOR ACCURATE RADIATION THERAPY
Björn Nutti, Åsa Kronander, Mattias Nilsing, Kristofer Maad, Cristina Svensson, Hao Li
Eurographics 2014 Short Papers presented at the 35th Annual Conference of the European Association for Computer Graphics, (Eurographics 2014 Short Papers), 04/2014

[16] A STATISTICAL SHAPE MODEL OF TROCHLEAR DYSPLASIA OF THE KNEE
Annemieke Van Haver, Peter Mahieu, Tom Claessens, Hao Li, Christophe Pattyn, Peter Verdonk, Emmanuel A. Audenaert
The Knee Journal Elsevier 2013, (KNEE 2013), 12/2013

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Deepfakes and the Fog of Truth (CBSN Originals, Himself) **2021**
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ABC News - Nightline: Deepfakes are Becoming Easier to Make (ABC News, Himself) **2021**
Travis - Waving at the Window (Pinscreen, Deepfake VFX) **2021**
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Ghost in the Shell - 4K Ultra HD Featurette (Lionsgate, Himself) **2020**
iHuman (TFIP, Himself) **2019**
The Fifth Estate: The Deepfake (CBC, Himself) **2018**
Follow This (BuzzFeed / Netflix, Himself) **2018**
Blade Runner 2049 (USC Institute for Creative Technologies, Light Stage Processing Supervisor) **2017**
Valerian and the City of a Thousand Planets (Vision & Graphics Lab, Director) **2017**
Furious 7 (Weta Digital, Researcher) **2015**
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TALKS

FIND YOUR PATH IN AI
Speaker, MBZUAI MAIlis, Abu Dhabi, 04/2025

THE FUTURE OF GENERATIVE MEDIA: FROM VFX AND CONTENT CREATORS TO IMMERSIVE COMMUNICATION
Speaker, ISID 5th International Symposium on Intelligence Design 2025, Kanazawa, 02/2025

MULTIMODALITY AND BEYOND: A GLIMPSE ON POTENTIAL FUTURES OF HEALTHCARE
Speaker, ECR European Congress of Radiology 2025, Vienna, 02/2025

GEN-AI FOR VIDEO: FROM VFX TO CONTENT CREATION AND HYPER-PERSONALIZATION
Speaker, Deloitte Digital: Beyond Boundaries, Dubai, 02/2025

AI REVOLUTION: FOUNDERS LEADING THE CHARGE
Speaker, NYUAD Slush'D 2025, Abu Dhabi, 02/2025

HOW HOLLYWOOD AI HELPS CREATORS GO GLOBAL
Speaker, MTC True Tech AI, Virtual, 03/2025
Keynote Speaker, 1 Billion Followers Summit, Dubai, 01/2025
Invited Talk, USC CS Colloquium, Los Angeles, 01/2025

PINSCREEN: THE MOST ADVANCED GENERATIVE AI SOLUTION FOR DUBBING AND VFX
Speaker, Sony Group Corporation, Tokyo, 12/2024
Speaker, MBZUAI Incubation and Entrepreneurship Center Epoch 1.0, Abu Dhabi, 11/2024

EXPLORE THE DEEPFAKE: BETTER-INFORMED DECISION MAKING IN THE ERA OF AI
Speaker, MBZUAI X Mubadala: Executive Round Table, Abu Dhabi, 10/2024

VOODOO VR: ONE-SHOT NEURAL AVATARS FOR VIRTUAL REALITY
Speaker, Real-Time Round-Table: Up Close & Personal with Real-Time Live!, SIGGRAPH 2024, Denver, 07/2024

DISTORTING OR ENHANCING REALITIES USING GENERATIVE AI
Speaker, MTC, Virtual, 03/2025
Invited Speaker, Global Research Conference on Robotics and Artificial Intelligence 2024, Dubai, 11/2024
Keynote Speaker, United Nations AI For Good Global Summit 2024, Geneva, 05/2024

NO MORE SUBTITLES OR DUBBING! DISCOVER NEW GENERATIVE AI LIP SYNCHRONIZATION TECHNOLOGY FOR FOREIGN LANGUAGE FILMS & TV
Speaker, Marché du Film: Festival de Cannes 2024, Cannes Next, Cannes, 05/2024

INVEST IN YOUR AI FUTURE
Speaker, Machines Can See Summit 2024, Dubai, 04/2024

AI IN MEDIA AND ENTERTAINMENT
Speaker, NAB Show 2024, Las Vegas, 04/2024

GENERATIVE AI FOR CONTENT PRODUCTION: FROM STORYTELLING TO VFX, AI LIP SYNC & BEYOND
Speaker, Huawei CG Workshop 2024, Tokyo, 12/2024
Keynote Speaker, EAI International Conference: ArtsIT Interactivity & Game Creation, Abu Dhabi, 11/2024
Invited Talk, Walt Disney Studios, StudioLab, Burbank, 08/2024
Keynote Speaker, NAB Show 2024 Broadcast Engineering and IT (BEIT), Las Vegas, 04/2024

GEN-AI FOR AVATAR CREATION AND VFX
Invited Talk, University of Tokyo, Tokyo, 04/2024

FOUNDERS PANEL: AI AND ENTREPRENEURSHIP
Speaker, MBZUAI/StartAD IEC Community Engagement, Abu Dhabi, 01/2024

GENERATIVE AI FOR HUMAN SYNTHESIS AND WORLD CAPTURE
Speaker, Fortune Global Forum 2023, AI Immersion: Visit to MBZUAI, Abu Dhabi, 11/2023
Speaker, MBZUAI Stakeholder & Technology Day, Abu Dhabi, 11/2023
Invited Talk, Dubai Police, Dubai, 11/2023

FACING THE FUTURE – IMPLEMENTING AI-POWERED DIGITAL HUMANS ACROSS DISCIPLINES
Speaker, HICSS 2024, Honolulu, 01/2024

VIRTUAL TELEPORTATION INSTEAD OF TRANSPORTATION
Speaker, GITEX GLOBAL 2023, Dubai, 10/2023

AI ARMCHAIR ACTIVATION 1: HOW AI CAN GIVE YOU SUPERPOWERS
Speaker, MBZUAI AI Armchair Activation, Abu Dhabi, 09/2023

UNLEASHING THE POWER OF GENERATIVE AI IN MEDIA AND ENTERTAINMENT
Speaker, AngelsDeck Venture Talks, Virtual, 07/2023

EMPOWERING THE METAVERSE THROUGH GENERATIVE AI
Keynote Speaker, IEEE IWCMC 2023, Marrakesh, 06/2023

CONTROLLABLE GENERATIVE AI FOR THE METAVERSE AND VFX
Keynote Speaker, VFXRIO Live 2023, Rio de Janeiro, 06/2023
Invited Talk, Waseda University, Tokyo, 06/2023
Speaker, Machines Can See Summit 2023, Dubai, 05/2023

ENABLING THE METAVERSE WITH 3D VISION AND GENERATIVE AI
Invited Talk, NTU High Performance and Scientific Computing Center, National Taiwan University, Taipei, 05/2023

COMMERCIALIZING AI: APPLICATIONS IN TECH, INDUSTRY, AND BUSINESS
Speaker, A Deepfake Future: Protecting National Security and Democracy in an Increasingly Synthetic World, Ottawa, 05/2023

DISTORTING REALITY USING GENERATIVE AI – THE FUTURE OF COMMUNICATION AND CONTENT
Speaker, OMG 2023 The Road to COP28, Dubai, 05/2023

HOW AI CAN UNLOCK THE METAVERSE AND THE FUTURE OF EDUCATION
Keynote Speaker, Chief Future Officer Forum, Dubai, 05/2023

TELEPORTATION INSTEAD OF TRANSPORTATION
Speaker, MBZUAI Board of Trustees Meeting (with H.E. Dr. Sultan Ahmed Al Jaber), Abu Dhabi, 04/2023

BUILDING A MORE SUSTAINABLE WORLD THROUGH THE METAVERSE
Speaker, Zayed Sustainability Prize, Voices of Sustainability Fireside Chat Series, Abu Dhabi, 02/2023

DIGITAL HUMAN EVOLUTION: FROM 3D GRAPHICS TO AI SYNTHESIS
Speaker, K-Meta: Pinscreen's Digital Human Workshop 2022, Virtual, 12/2022

IMMERSIVE PRESENCE FOR THE METAVERSE
Speaker, MBZUAI Outreach Program 2022, Abu Dhabi, 11/2022
Speaker, GITEX GLOBAL 2022, Dubai, 10/2022

AI SYNTHESIS FOR METAVERSE CAPABILITIES & NEXTGEN AI VFX
Keynote Speaker, Pacific Graphics 2022, Kyoto, 10/2022
Invited Talk, Visual Computing and AI Department, Max-Planck-Institut für Informatik, Saarbrücken, 09/2022

Speaker, Human-Centered AI Conference 2022, Los Angeles, 09/2022
Speaker, VinAI Research Seminar, Ho Chi Minh City, 9/2022
Speaker, Global Metaverse Conference & ROK-ASEAN Forum 2022, Busan, 8/2022
Keynote Speaker, ICVSS 2017 International Computer Vision Summer School, Sicily, 7/2022

THE CHAMPION: NEURAL RENDER CASE STUDY MEET & GREET
Speaker, Birds of Feather, SIGGRAPH 2022, Vancouver, 07/2022

DEEPFAKES – PURE EVIL OR ALSO AN OPPORTUNITY?
Speaker, re:publica 2022, Berlin, 06/2022

DON'T GET LOST IN TRANSLATION: THE NEURAL RENDERING OF THE CHAMPION
Speaker, FMX 2022, Stuttgart, 05/2022

AUGMENTED & VIRTUAL REALITY: STATE-OF-THE-ART & FUTURE PERSPECTIVES
Invited Talk, Center for Higher Defense Studies (Centro Alti Studi Difesa), Italian Defense Joint Institution, Rome, 05/2022

TELEPORTING OURSELVES INTO THE METAVERSE
Speaker, Stanford HAI Workshop on Simulation and Embodied AI 2022, Stanford, 04/2022

MAD: METAVERSE AUGMENTATION FOR DEFENSE
Speaker, DARPA Home Day Briefing 2022, Arlington, 11/2022
Speaker, DARPA ISAT Spring Conference 2022, Virtual, 04/2022

STYLEGAN-BASED 3D AVATAR SYNTHESIS
Speaker, Dagstuhl Seminar 2022 3D Morphable Models and Beyond, Wadern, 03/2022

DIGITIZING 3D HUMANS: FROM GEOMETRIC CAPTURE TO NEURAL SYNTHESIS
Speaker, VIZBI 2022, Los Angeles, 03/2022

AI SYNTHESIS FOR THE METAVERSE: FROM AVATARS TO 3D SCENES
Speaker, CMU Tech & Entrepreneurship ML Seminar, Pittsburgh, 04/2022
Speaker, Synthetic Futures Livestream Event Feb 2022, Virtual, 02/2022
Invited Talk, MBZUAI Research Talks, Mohamed Bin Zayed University of Artificial Intelligence, Abu Dhabi, 02/2022

MOTION STYLOMETRY FOR DEEPFAKE DETECTION
Speaker, DARPA SemaFor PI Meeting #3, Arlington, 01/2022

ENABLING THE METAVERSE WITH AI-DRIVEN 3D AVATARS
Keynote Speaker, Global Metaverse Conference 2021, Seoul, 12/2021
Speaker, AWE 2021, Santa Clara, 11/2021
Speaker, 2021 Y-Base AI Symposium: What You Need to Know About The Metaverse, Virtual, 10/2021
Speaker, KoVRA Global Advanced Technology Training Workshop 2021 (Part 1), Virtual, 10/2021
Invited Talk, Krafton, Virtual, 08/2021

AI SYNTHESIS: FROM AVATARS TO 3D SCENES
Speaker, KAIST SoC Colloquium 2021, Korea Advanced Institute of Science and Technology, Daejeon, 12/2021
Speaker, Seminar on 3D Geometry & Vision, Virtual, 10/2021
Speaker, Distinguished Virtual Seminar, Max Planck Institute for Intelligent Systems, Tübingen, 07/2021
Keynote Speaker, The 3rd CVPR Workshop on Dynamic Scene Reconstruction, Virtual, 06/2021

ENABLING THE METAVERSE WITH 3D DEEP LEARNING
Speaker, KoVRA Global Advanced Technology Training Workshop 2021 (Part 2), Virtual, 12/2021

DEEPFAKE PRODUCTION: TECHNOLOGY, DETECTION, POTENTIAL
Speaker, Deepfake Video Project Huddle, The University of Sydney, Sydney, 10/2021

THE FASHION INDUSTRY COULD BE THE KILLER APP FOR DIGITAL HUMANS
Speaker, View Conference 2021, Featured Sessions, Torino, 10/2021

FACING FORWARD
Speaker, Pacific Graphics 2021, Featured Sessions, Wellington, 10/2021

BEYOND TERRORISM, CYBER, AND PANDEMICS: WHAT'S NEXT?
Speaker, Singapore Defense Technology Summit, Singapore, 10/2021

APPLICATIONS IN AI: DEEPFAKES
Speaker, McKinsey & Company T-30 Summit 2021, Carmel, 09/2021

UNPACKING DEEPFAKES - CREATION AND DISSEMINATION OF DEEPFAKES
Speaker, Global Media Congress 2022, Abu Dhabi, 11/2022
Keynote Speaker, Academy of International Affairs: The Geopolitics of Disinformation 2022, Bonn, 08/2022
Invited Talk, Princeton University, Princeton, 04/2022
Invited Talk, Singapore Defense Science & Technology Agency, Virtual, 09/2021
Speaker, United Nations Institute for Disarmament Research: the 2021 Innovations Dialogue, Geneva, 08/2021

BE YOURSELF. OR NOT.
Speaker, Virtual L'OréalCon 2021, Virtual, 06/2021

MASTERCLASS: RISKS AND OPPORTUNITIES OF DEEPFAKES
Speaker, 50th St. Gallen Symposium, St. Gallen, 05/2021

MOTION STYLOMETRY FOR AI-SYNTHESIZED MEDIA
Speaker, DARPA SemaFor PI Meeting #2, Arlington, 05/2021

AI-GENERATED DIGITAL HUMANS
Speaker, TikTok Lecture Series, ByteDance, Virtual, 05/2021
Speaker, FMX 2021, Stuttgart, 05/2021
Speaker, Data Science Hour, Ericsson Research, Santa Clara, 4/2021
Speaker, TUM AI Lecture Series 2021, Munich, 4/2021
Keynote Speaker, SimAUD 2021 Human+, Los Angeles, 4/2021
Keynote Speaker, VFXRIO Live 2021, Rio de Janeiro, 3/2021

DIGITAL HUMANS FOR DIGITAL TWINS
Speaker, Nvidia GTC 2021, Virtual, 4/2021

AR/VR – WILL IT BE MAINSTREAM? WHEN?
Speaker, McKinsey & Company AI & Disruption 2.0 Series 2021, Virtual, 02/2021

INSIDE DEEPFAKES
Speaker, Fair Media Council Fast Chat LIVE, Virtual, 02/2021

MEDIA FORENSICS: WHAT THE DEEP FAKE?
Speaker, USC Sidney Harman Academy for Polymathic Study, University of Southern California, Los Angeles, 01/2021

MAKING AVATARS AND VOLUMETRIC TELEPORTATION ACCESSIBLE USING 3D DEEP LEARNING
Keynote Speaker, IEEE WACV 2021, Waikoloa, 01/2021
Speaker, HKUCS Computer Vision Lab Virtual Workshop Series, University of Hong Kong, Hong Kong, 01/2021

DIGITAL HUMANS ARE BACK! CREATING AND USING BELIEVABLE AVATARS IN THE AGE OF COVID
Speaker, SIGGRAPH Asia 2020, Featured Sessions, Virtual, 12/2020

THE DANGER OF DEEPFAKES
Speaker, Web Summit 2020, Lisbon, 12/2020
Invited Talk, University of Virginia, Charlottesville, 10/2020

VIRTUAL CONNECTIVITY AND AVATARS IN A POST-PANDEMIC WORLD
Keynote Speaker, Future Summit 2020, Virtual, 11/2020
Speaker, Digital DNA 2020 Summit, Virtual, 11/2020
Speaker, Brand Week Istanbul 2020, Istanbul, 11/2020
Keynote Speaker, Infinity Festival 2020, Los Angeles, 11/2020
Speaker, Couch Lesson: AI + Reality, Goethe Institut, Virtual, 10/2020
Speaker, 4th Global Programmers' Festival 2020, Xi'an, 10/2020
Keynote Speaker, CSIRO Symposium: The Future of Meetings, Sydney, 09/2020
Keynote Speaker, McKinsey Artificial Intelligence Webinar, Redwood City, 09/2020
Keynote Speaker, 2nd ECCV Workshop on Sensing, Understanding, and Synthesizing Humans, Glasgow, 08/2020

DATA, DEEP FAKES, FAKE NEWS – THE FUTURE
Speaker, The Now! Fest 2020, Virtual, 09/2020

AI-SYNTHESIZED HUMANS: OPPORTUNITY & THREAT
Speaker, Annual Congressional European Parliamentary Initiative 2020, Washington D.C., 09/2020

VIRTUAL AVATARS AND VOLUMETRIC TELEPORTATION
Keynote Speaker, ECCV Workshop on Shape Recovery from Partial Textured 3D Scans, Glasgow, 08/2020

DEEPFAKES AND STYLOMETRY FOR DETECTION AND ATTRIBUTION
Speaker, DARPA SemaFor Kickoff Meeting 2020, Arlington, 08/2020

DEEPFAKES & FACIAL STYLOMETRY
Speaker, DARPA SemaFor Internal Kickoff Meeting 2020, Berkeley, 08/2020

ETHICAL CONSIDERATIONS IN SOFTWARE PROJECTS
Speaker, University of Queensland, Brisbane, 07/2020

FYC: AN A.I. EXPERIMENT
Speaker, Zoom Virtual Beings Summit 2020, San Francisco, 07/2020

HUMAN DIGITIZATION IN A POST-COVID-19 WORLD
Keynote Speaker, CVPR Workshop on Media Forensics, Seattle, 06/2020
Speaker, RealTime Conference 2020, New York, 06/2020

OUR NEW ALGORITHMIC WORLD ORDER: COVID-19, SURVEILLANCE & END OF TRUTH
Speaker, Hot Docs Big Ideas Conversation, Toronto, 05/2020

FROM #SOCIALDISTANCING TO #CONNECTINGVIRTUALLY
Speaker, Amazon Virtual Humans Workshop, Seattle, 04/2020

DEEPFAKES AND APPLICATIONS IN E-COMMERCE
Speaker, McKinsey & Company NWDS 2020, San Francisco, 03/2020

AI-DRIVEN COMPLETE HUMAN DIGITIZATION AND PERFORMANCE CAPTURE
Speaker, ONR HPT&E Technical Review: Warrior Resilience 2020, Orlando Science Center, Orlando, 02/2020

DEEPFAKES: DO NOT BELIEVE WHAT YOU SEE
Speaker, World Economic Forum: Annual Meeting 2020, Davos, 01/2020

DIGITAL HUMANS & DEEP FAKES
Keynote Speaker, VFXRIO 2019, Rio de Janeiro, 11/2019

AI-DRIVEN HUMAN AND CONTENT DIGITIZATION
Speaker, Amazon Research Days 2019, Los Angeles, 11/2019
Keynote Speaker, Infinity Festival 2019, Los Angeles, 11/2019
Speaker, USC Viterbi Grand Challenge Scholars Lecture Series, Los Angeles, 11/2019
Speaker, USC Viterbi Computer Science Advisory Board Meeting, Los Angeles, 11/2019
Keynote Speaker, 10th International Workshop on Human Behaviour Understanding, ICCV 2019, Seoul, 10/2019
Speaker, 3rd Global Programmers' Festival 2019, Xi'an, 10/2019
Invited Talk, GAMES (Graphics And Mixed Environment Symposium) Webinar, Los Angeles, 10/2019
Invited Talk, MIT Computer Vision Seminar, Massachusetts Institute of Technology, Cambridge, 09/2019

AI-DRIVEN 3D SHAPE AND MOTION SYNTHESIS
Speaker, UARC Technical Advisory Board Meeting 2019, Los Angeles, 11/2019

IS THAT REAL? DEEPFAKES AND TRUSTED CONTENT
Speaker, NAB Show 2019, New York, 10/2019

AI-BASED TELEPORTATION
Speaker, Second CONIX Annual Review 2019, Carnegie Mellon University, Pittsburgh, 10/2019

COMPLETE HUMAN DIGITIZATION USING PIXEL-ALIGNED IMPLICIT FUNCTIONS
Speaker, ONR HPT&E Technical Review and S&T Expo, Quantico US Marine Corps Base, Stafford County, 09/2019

REIMAGINING INNOVATION IN ERA OF AI: FROM VIRTUAL BEINGS TO DEEPFAKES
Speaker, MIT Technology Review EmTech 2019, Cambridge, 09/2019

CONNECTING 3D SHAPES AND 2D IMAGES USING AI AND DIFFERENTIABLE RENDERING
Speaker, Scenes from Video IV, San Bernardo, 09/2019

DESIGNING A HUMAN-CENTERED FUTURE
Speaker, World Economic Forum: Annual Meeting of the New Champions, Dalian, 07/2019

AI AND HUMAN DIGITIZATION: WHEN SEEING IS NOT BELIEVING?
Speaker, DARPA ISAT Summer Conference 2019, Woods Hole, 08/2019
Speaker, Virtual Beings Summit, San Francisco, 07/2019
Speaker, World Economic Forum: Technology Pioneers Welcome Reception & Dinner, Dalian, 07/2019
Speaker, CVPR Workshop on 3D Humans 2019, Long Beach, 06/2019
Speaker, Refactor Camp 2019, Santa Monica, 06/2019
Keynote Speaker, Vivid Sydney 2019, Sydney, 06/2019
Invited Talk, The University of New South Wales, Sydney, 06/2019
Speaker, Naval Postgraduate School, MOVES Institute, Monterey, 05/2019
Speaker, ICSF Robotics & AI in Extreme Environments, ARL West, Los Angeles, 03/2019
Speaker, DARPA MediFor PI Meeting 2019, DARPA Conference Center, Arlington, 02/2019
Speaker, MIT Technology Review EmTech Asia 2019, Singapore, 01/2019
Keynote Speaker, DISRUPT.SYDNEY 2018, Sydney, 09/2018
Speaker, IET EngTalks, London, 09/2018

PINSCREEN/USC/ICT OR: HOW I LEARNED TO STOP WORRYING AND LOVE 3 JOBS
Speaker, CMIC Workshop 2019, Computational Media Innovation Centre, Victoria University, Wellington, 04/2019

COMPLETE 3D HUMAN DIGITIZATION
Speaker, ONR HPT&E Technical Review: Warrior Resilience 2019, Orlando Science Center, Orlando, 02/2019

PHOTOREALISTIC HUMAN DIGITIZATION AND RENDERING USING DEEP LEARNING
Speaker, Softbank Open Innovation The Second BBM Summit 2018, Hakodate, 12/2018
Invited Talk, Sony Corporation, Tokyo, 12/2018
Invited Talk, Waseda University, Tokyo, 12/2018
Keynote Speaker, VRST 2018, Tokyo, 12/2018
Invited Talk, Dreamscape Immersive, Los Angeles, 08/2018
Invited Talk, Amazon, Seattle, 08/2018
Speaker, US Army TRADOC Workshop 2018, Los Angeles, 08/2018
Speaker, Machine Learning for 3D Understanding, TUM Institute for Advanced Study, Munich, 07/2018
Speaker, Sixth International Workshop on Computer Vision 2018, Modena, 05/2018
Keynote Speaker, CMS Meeting of the Minds, Caltech, Pasadena, 05/2018

THE FUTURE OF MIXED REALITY
Speaker, First CONIX Annual Review 2018, Carnegie Mellon University, Pittsburgh, 09/2018

3D AVATARS, VIRTUAL REALITY, AND DEEP LEARNING
Speaker, USC London Delegation Trip 2018, London, 02/2018

THE FUTURE OF FAKE NEWS
Speaker, World Congress of Science and Factual Producers, San Francisco, 12/2017

VIRTUAL AVATAR CREATION USING DEEP LEARNING
Speaker, SIGGRAPH Asia Symposium on AR and VR 2017, Bangkok, 12/2017

DIGITAL HUMAN TELEPORTATION USING DEEP LEARNING
Speaker, USC Viterbi Corporate Advisory Board Meeting, Los Angeles, 04/2018
Keynote Speaker, CVMP 2017, London, 11/2017
Speaker, Sony US Research Center, San Jose, 11/2017
Keynote Speaker, SoftBank Ventures Forum 2017, Seoul, 10/2017
Speaker, USC China Miniforum, Los Angeles, 9/2017
Speaker, SCA 2017 Symposium on Computer Animation, Los Angeles, 7/2017
Keynote Speaker, ICVSS 2017 International Computer Vision Summer School, Sicily, 7/2017
Keynote Speaker, ACM SIGGRAPH Taipei Chapter Computer Graphics Workshop 2017, Taichung, 6/2017
Keynote Speaker, S3PM 2017 International Convention on Shape, Solid, Structure, & Physical Modeling, Berkeley, 6/2017
Speaker, FMX 2017, Stuttgart, 05/2017
Invited Talk, Ochanomizu University, Tokyo, 2/2017

AVATAR DIGITIZATION AND IMMERSIVE COMMUNICATION USING DEEP LEARNING
Speaker, UARC Technical Advisory Board Meeting 2017, Los Angeles, 09/2017

CAPTURE, RENDERING, AND DISPLAY FOR VIRTUAL HUMANS
Speaker, UARC ICT Mission Projects 2017, Los Angeles, 02/2017

LEARNING CORRESPONDENCES BETWEEN CLOTHED HUMAN SHAPES
Speaker, ECCV Workshop on Geometry Meets Deep Learning 2016, Amsterdam, 10/2016

MARKERLESS MOTION CAPTURE
Speaker, Human Performance, Training & Education Tech Review, Quantico US Marine Corps Base, Stafford County, 10/2016

REAL-TIME FACIAL MOTION CAPTURE AND ITS APPLICATIONS
Speaker, 4th Huawei Smart Device Summit on Multimedia Technology, Shenzhen, 09/2016

DEMOCRATIZING HUMAN DIGITIZATION
Invited talk, Nickelodeon Animation Studio, Burbank, 02/2017
Keynote Speaker, SIGGRAPH Asia Workshop on Virtual Reality Meets Physical Reality 2016, Macao, 12/2016
Speaker, The Real Deal @ USC, Los Angeles, 11/2016

Speaker, TEDxHollywood, Los Angeles, 09/2016

DEEP LEARNING: A NEW TOOL FOR CONTENT CREATION AND GAME DESIGN
Speaker, SIGGRAPH 2016 Special Session, Open Problems in Real-Time Rendering, Anaheim, 07/2016

TÊTE-À-TÊTE IN CYBERSPACE
Speaker, Fifth International Workshop on Computer Vision 2016, Lecce, 05/2016

DIGITIZING HUMANS INTO VR USING DEEP LEARNING
Speaker, REAL 2016, San Francisco, 3/2016
Speaker, NVidia Deep Learning Workshop, Los Angeles, 02/2016

MARKERLESS PERFORMANCE CAPTURE FOR AUTOMATED FUNCTIONAL MOVEMENT SYSTEM
Speaker, Warrior Resilience Tech Review, Office of Naval Research, Arlington, 02/2016

BRIDGING PHYSICAL AND DIGITAL WORLDS
Speaker, 16th KOCSEA Technical Symposium 2015, Harvey Mudd College, Claremont, 12/2015
Speaker, SLUSH Conference 2015, Helsinki, 11/2015
Speaker, USC Global Conference 2015, Shanghai, 10/2015

HUMAN DIGITIZATION AND FACIAL PERFORMANCE CAPTURE FOR SOCIAL INTERACTIONS IN VR
Speaker, VRLA Winter Expo, Los Angeles, 01/2016
Invited Talk, Google, Seattle, 10/2015
Invited Talk, Disney Consumer Products, Glendale, 07/2015
Invited Talk, MIT Computer Graphics Group, Massachusetts Institute of Technology, Cambridge, 06/2015

SOCIAL INTERACTION IN CYBERSPACE
Speaker, SLUSH Future Brunch, No Name Club, Los Angeles, 05/2015

DATA-DRIVEN HAIRSTYLING
Speaker, Workshop on Functoriality in Geometric Data 2015, HKUST IAS, Hong Kong, 04/2015

IMMERSIVE TELEPRESENCE WITH 3D SENSING AND VR HMD
Speaker, USC Integrated Media Systems Center Retreat 2015, Los Angeles, 04/2015

DEMOCRATIZING 3D HUMAN CAPTURE: GETTING HAIRY!
Invited Talk, Google, Mountain View, 09/2015
Speaker, Rotary Club, Santa Monica, 09/2015
Invited Talk, Intel, Santa Clara, 06/2015
Invited Talk, Apple, Cupertino, 05/2015
IST Lunch Bunch, Caltech, Pasadena, 05/2015
Invited Talk, SnapChat, Venice, 04/2015
Speaker, LA ACM SIGGRAPH Innovative Research in Computer Graphics at USC and ICT, Los Angeles, 03/2015
Keynote Speaker, International Conference on 3D Vision, Tokyo, 12/2014
Keynote Speaker, ACM SIGGRAPH Conference on Motion in Games 2014, Los Angeles, 11/2014

THE FUTURE OF EXPERIENCING REALITY
Speaker, New York Global Conversation 2014, New York, 10/2014

ON THE FUTURE OF DIGITAL CHARACTERS
Keynote Speaker, Vivid Sydney 2014, Sydney, 06/2014

HUMAN CAPTURE WITH DEPTH SENSORS
Keynote Speaker, Making Augmented Reality Real, NAIST, Nara 08/2014
Invited Talk, Victoria University, Wellington, 07/2014
Chalk Talk, Weta Digital, Wellington, 07/2014

Invited Talk, Pelican Imaging Corporation, Mountain View, 05/2014

3D SELFIES!
Speaker, Depth Camera Birds of Feather, SIGGRAPH 2014, Vancouver, 08/2014
Speaker, FMX 2014, Stuttgart, 04/2014

DEMOCRATIZING 3D SCANNING FOR 3D PRINTING
Speaker, USC Trustee Conference, La Quinta, 03/2014

3D HUMAN CAPTURE: FROM VFX TO THE MAINSTREAM
Speaker, Interactive Media Forum, USC's School of Cinematic Arts, Los Angeles, 04/2014
Speaker, CESASC 52nd Annual Convention, San Gabriel, 04/2014
Invited Talk, University of California, Santa Barbara, 02/2014

HOW DEPTH SENSING TECHNOLOGY WILL CHANGE US
Speaker, Tech Plus Forum (tech+), Seoul, 11/2013

DEMOCRATIZING HUMAN CAPTURE
TR35 Talk, MIT Technology EmTech 2013, Cambridge, 10/2013

3D HUMAN CAPTURE FOR EVERYONE
Speaker, USC Board of Trustees Meeting (with Steven Spielberg), Los Angeles, 12/2013
Invited Talk, SIAT Chinese Academy of Sciences, Shenzhen, 11/2013
Invited Talk, Harvard University, Cambridge, 10/2013

LOW-IMPACT HUMAN DIGITIZATION AND PERFORMANCE CAPTURE
Invited Talk, Dreamworks Animation, Glendale, 08/2013

DIGITIZING HUMANS IN MOTION FROM A GEOMETRIC PERSPECTIVE
3D Imaging and Computing 2012, National Chiao Tung University, Hsinchu, 12/2012

DYNAMIC SHAPE RECONSTRUCTION AND TRACKING
R&D Forum, Industrial Light & Magic, Letterman Digital Arts Center, San Francisco, 04/2012

GEOMETRIC CAPTURE OF HUMAN PERFORMANCES
Faculty Candidate Seminars, Department of Computer Science, Columbia University, New York, 03/2012
Guest Presentation, Rhythm & Hues Studios, Los Angeles, 03/2012
Chalk Talk, Digital Domain, Venice, 03/2012
CS Colloquium Series, Computer Science Department, University of Southern California, Los Angeles, 03/2012

MAYA FOR GRAPHICS SCIENTISTS
Invited Talk, Princeton Computer Graphics Group, Princeton University, New Jersey, 02/2012

TRACKING DEFORMABLE SURFACES
Computer Graphics Reading Group, University of Pennsylvania, Philadelphia, 01/2012

CAPTURING 3D ANIMATION FOR ENTERTAINMENT AND SCIENCES
CVGC Seminar, Columbia Computer Graphics Group, Columbia University, New York, 12/2011

DYNAMIC SHAPE CAPTURE WITH APPLICATIONS IN ART AND SCIENCES
Invited Talk, Microsoft, Redmond, 11/2011

NON-RIGID REGISTRATION IN ENTERTAINMENT AND SCIENCE
Invited Talk, Department for Perceiving Systems, Max-Planck-Institut für Intelligente Systeme, Tübingen, 09/2011

HUMAN BODIES, FACES, AND HAIR
Guest Lecture, Courant Institute of Mathematical Sciences, New York University, New York, 09/2011

ROBUST NON-RIGID 3D ALIGNMENT AND APPLICATIONS
R&D Seminar, Vision Technologies, SRI International/Sarnoff Corporation, New Jersey, 07/2011

CAPTURE, RECONSTRUCT, TRACK, RIG, RETARGET!
Invited Talk, Princeton Computer Graphics Group, Princeton University, New Jersey, 08/2010

INVERSE ENGINEERING DYNAMIC SHAPES FOR COMPUTER ANIMATION
Invited Talk, Courant Institute of Mathematical Sciences, New York University, New York, 08/2010

ANIMATION RECONSTRUCTION
Invited Talk, Columbia Computer Graphics Group, Columbia University, New York, 08/2010

GENERATING BLENDSHAPES FROM EXAMPLES AND CAPTURING WATERTIGHT HUMAN PERFORMANCES
R&D Seminar, Industrial Light & Magic, Letterman Digital Arts Center, San Francisco, 08/2010

A PRACTICAL FACIAL ANIMATION SYSTEM: FROM CAPTURE TO RETARGETING
Research Seminar, Pixar Animation Studios, Emeryville, 08/2010

ART-DIRECTABLE AND DATA-DRIVEN FACIAL ANIMATION
Invited Talk, Institute of Animation, Visual Effects and Digital Postproduction, Filmakademie Baden-Württemberg, Ludwigsburg, 05/2010

ROBUST RECONSTRUCTION OF DYNAMIC SHAPES AND REAL-TIME FACIAL ANIMATION
Invited Talk, Institute for Creative Technologies, University of Southern California, Marina del Rey, 11/2009

DEFORMING GEOMETRY RECONSTRUCTION AND LIVE FACIAL PUPPETRY
R&D Seminar, Industrial Light & Magic, Letterman Digital Arts Center, San Francisco, 10/2009

ANIMATION RECONSTRUCTION FROM A SINGLE-VIEW
Invited Talk, Computer Graphics Department, Max-Planck-Institut für Informatik, Saarbrücken, 05/2009

ACTIVE SHAPE ACQUISITION: FROM IMAGES TO 3-D SURFACES
Invited Talk, Graduate School of Global Information and Telecommunication Studies, Waseda University, Tokyo, 06/2006

3D SCANNING FOR EVERYONE
Ninth SIAM Conference on Geometric Design and Computing (SIAM-GD'05), Phoenix, Arizona, 10/2005

SURFACE RECONSTRUCTION USING COLORED STRIPE PROJECTIONS
Graphics Lunch Seminar, Computer Graphics Laboratory, ETH Zurich, 09/2005

REKONSTRUKTION MIT STRUKTURIERTEM LICHT
First Status Report Meeting of the Institute for Scientific Computing and Mathematical Modeling, Universität Karlsruhe (TH), 04/2005

SOFTWARE & DATASETS

Pindub.ai
http://www.pindub.ai
Pinscreen's Pindub.ai is a mobile/web platform allowing anyone to perform generative AI-based lip synchronization for personalized video creation, visual dubbing, and language translation. Built on our advanced Hollywood-grade AI VFX pipeline, this technology is now accessible to everyone.

Avatar Neo
http://www.avatarneo.com
Avatar Neo is Pinscreen's photorealistic 3D avatar creation solution from an unconstrained input 2D photograph. Using advanced generative AI, it produces lifelike 3D head models that are normalized for expression, pose, and lighting. Our solution includes a creator application for Mac OS and Windows, along with an SDK compatible with Unreal and Unity.

Expo Dubai Xplorer
https://apps.apple.com/app/expo-xplorer/id1584208919
The official multi-player metaverse experience for the world expo 2020 in Dubai developed by Magnopus and Pinscreen. Users can digitize their own AI-powered avatars and connect with others in real-time across the largest AR/VR experience deployed in the world with an interactive digital twin of the 4.38km² Expo site.

Pinscreen
http://www.pinscreen.com
A mobile app that allows anyone to instantly create a 3D avatar by uploading a selfie or an arbitrary 2D photograph. The avatar can then be animated using the phone camera and produce AR selfie content or Animojis. The software can be downloaded from Apple's App Store and has been developed by the entire Pinscreen team.

USC-HairSalon
A large publicly accessible 3D hairstyle database for hair capture, modeling, simulation, and rendering research. This data collection is also a great resource for benchmark and evaluation purposes. My co-authors are Liwen Hu, Chongyang Ma, and Linjie Luo.

Shapify.me
http://www.shapify.me
A free application for creating 3D self-portraits directly using Microsoft's Kinect sensor. A person rotates in front of the sensor and the software automatiaclly produces a complete textured digital model of the person. The 3D model can be uploaded to a server and 3D printed. My co-authors are E. Vouga, A. Gudym, and G. Gusev.

ILM's Monster Mirror
Industrial Light & Magic's proprietary depth sensor-driven real-time facial animation system for instantaneous high fidelity facial performance capture for virtual filmmaking. The calibration-free system sets the current bar for realtime facial tracking accuracy and robustness. I co-developed the software with J. Yu, Y. Ye, and C. Bregler.

BeNTO 3D
http://www.bento3d.com
An easy to use geometry processing application created exclusively for Mac. The Cocoa based tool distinguishes from other competitors in that development of additional plugins and GUI extensions are considerably simplified.

face*shift*
http://www.faceshift.com
A software for real-time and markerless facial performance capture using Microsoft's Kinect sensor. The Qt-based application runs on Mac OS X and Windows 7 and is co-developed with T. Weise and S. Bouaziz. Faceshift has been acquired by Apple Inc. and its technology has been incorporated into the iPhone X.

Artec Studio
http://www.artec3d.com
Development of a state-of-the-art geometry processing pipeline for aligning and merging non-rigid 3D scan data.

PROFESSIONAL ACTIVITIES

Co-Curator and Member of the Global Future Councils
World Economic Forum (WEF) - Virtual and Augmented Reality Transformation Maps 2017-2022

Editor
International Journal of Computer Vision Special Issue 2022

Associate Editor

Computer Graphics Forum 2016-2019

Organizer

K-Meta 2022 Workshop: Digital Human Evolution: from 3D Graphics to AI Synthesis, Virtual, 12/2022
Global Media Congress 2022 Workshop: The Evolution of Disinformation, Abu Dhabi, 11/2022
DARPA ISAT Workshop: Metaverse Augmentation for Defense (MAD) 2022, Berkeley, 02/2022
ACM SIGGRAPH Asia 2019 Workshop: Truth in Graphics and the Future of AI-Generated Content, Brisbane, 11/2019
CONIX Mixed Reality Workshop 2018, USC Institute for Creative Technologies, Playa Vista, 08/2018

Program Committee (Computer Graphics)

ACM SIGGRAPH 2015 and 2016
ACM SIGGRAPH Asia 2017 and 2018
ACM SIGGRAPH Asia (E-Tech) 2013, 2014, 2015, and 2016
ACM SIGGRAPH Asia (Courses) 2020
ACM SIGGRAPH Asia (Technical Communications & Posters) 2014, 2015, 2016, and 2021
ACM SIGGRAPH Asia (Symposium in Mobile Graphics and Interactive Applications) 2015
Symposium on Computer Animation 2013, 2014, 2015, 2016, 2017, 2018, and 2019
Symposium on Geometry Processing 2012, 2016, 2017, 2018, and 2019
Eurographics 2014, 2015, and 2016
Eurographics (STAR) 2015
Eurographics (Short Papers) 2013, 2014, and 2015
Pacific Graphics 2012, 2013, 2014, 2015, 2016, 2017, and 2019
Shape Modeling International 2013 and 2017
International Conference on Computer Aided Design and Computer Graphics 2013 and 2015
International Conference on Computer Animation and Social Agents 2014, 2015, and 2016

Program Committee (Computer Vision)

IEEE International Conference on Computer Vision and Pattern Recognition 2017, and 2018
IEEE CVPR Workshop on Morphable Face Models: from Present to Future 2018
International Conference on 3D Vision 2014 and 2015
International Symposium on 3D Data Processing, Visualization and Transmission 2010
Workshop on Non-rigid Shape Analysis and Deformable Image Alignment 2010, 2011, 2012, and 2014

Reviewer

Nature Communications 2020
ACM SIGGRAPH 2008, 2009, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2024, and 2025
ACM SIGGRAPH Asia 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, and 2024
ACM Transaction on Graphics 2010, 2011, 2013, 2015, 2016, 2017, 2018, and 2019
IEEE International Conference on Computer Vision and Pattern Recognition 2016, 2017, 2018, 2019, 2020, 2021, 2022
International Conference on Computer Vision 2017, 2019, and 2025
European Conference on Computer Vision 2016 and 2020
ACM User Interface software and Technology Symposium 2014
Symposium on Computer Animation 2013, 2014, 2015, 2016, 2017, 2018, and 2019
Symposium on Geometry Processing 2007, 2008, 2012, 2016, 2017, 2018, and 2019
ACM Computing Surveys 2021
Eurographics 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2020, and 2023
Computer Graphics Forum 2010, 2011, 2016, 2017, and 2018
International Conference on 3D Vision 2014, 2015, 2017, and 2019
Workshop for Women in Machine Learning 2018
IEEE International Symposium on mixed and Augmented Reality 2015
3D Data Processing, Visualization and Transmission 2010
Non-rigid Shape Analysis and Deformable Image Alignment 2010, 2011, 2012, and 2014
Transactions on Visualization and Computer Graphics 2009, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2021, 2022
Transactions on Pattern Analysis and Machine Intelligence 2007, 2012, and 2017

International Journal of Computer Vision 2015
IEEE Computer Graphics and Applications 2013
International Conference on Computer Animation and Social Agents 2014, 2015, and 2016
EURASIP Journal on Advances in Signal Processing 2011
Graphical Models 2014
Computers & Graphics 2013, 2014, and 2023
Asian Conference on Computer Vision 2010
Pacific Graphics 2009, 2011, 2012, 2013, 2014, 2015, 2016, 2017, and 2019
Vision, Modeling, and Visualization Workshop 2006
Geometric Modeling and Processing 2006
Computer-Aided Design 2013
UAE GSRC 2023

Chair

DARPA ISAT Study 2021: Metaverse Augmentation for Defense (MAD) Chair (Co-Chair: Jaron Lanier, Michael Luby)
DARPA ISAT Virtual Woods Hole 2021, "Cool Stuff" Chair
DARPA ISAT Virtual Woods Hole 2020, "Cool Stuff" Chair
International Conference on 3D Vision 2019 Area Chair
International Conference on 3D Vision 2017 Area Chair
SIGGRAPH Asia 2018 Session Chair
SIGGRAPH Asia 2017 Session Chair
SIGGRAPH 2017 Session Chair
SIGGRAPH 2016 Session Chair
SIGGRAPH 2015 Session Chair
SIGGRAPH Asia (E-Tech) Prize 2013 and 2014
International Conference on 3D Vision 2015 Area Chair

Host

Machines Can See Summit 2025

Panels

Judge's Panel for the MIT TR 35 Innovators of 2025	**03/2025**
Judge's Panel for the MCS 2024 – Generative Interior Design Challenge	**04/2024**
Judge's Panel for the MIT TR 35 Innovators of 2024	**03/2024**
Swiss National Science Foundation Ambizione Research Proposal	**05/2023**
Judge's Panel for the MIT TR 35 Innovators of 2023	**03/2023**
Judge's Panel for ACM SIGGRAPH Asia 2022 Real-Time Live!	**08/2022**
Judge's Panel for the MIT TR 35 Innovators of 2022	**03/2022**
Judge's Panel for the MIT TR 35 Innovators of 2021	**03/2021**
European Research Council Research Proposal	**05/2020**
Judge's Panel for the MIT TR 35 Innovators of 2020	**03/2020**
Judge's Panel for the MIT TR 35 Innovators of 2019	**03/2019**
National Science Foundation (FW-HTF) Research Proposal	**07/2018**
Judge's Panel for the MIT TR 35 Innovators of 2018	**03/2018**
Qiu Shi Outstanding Young Scholar Award Selection Committee	**05/2017**
Judge's Panel for the MIT TR 35 Innovators of 2017	**05/2017**
European Research Council Research Proposal	**12/2016**
Judge's Panel for the MIT TR 35 Innovators of 2016	**05/2016**
European Research Council Research Proposal	**12/2015**
Judge's Panel for the MIT TR 35 Innovators of 2015	**04/2014**
Swiss National Science Foundation Research Proposal	**12/2014**
Judge's Panel for the MIT TR 35 Innovators of 2014	**05/2014**

Membership

World Economic Forum Global Future Councils	**11/2018 - 07/2022**
ACM SIGGRAPH	**06/2006 - ongoing**
IEEE	**09/2019 - ongoing**
Eurographics Association	**08/2011 - ongoing**
National Academy of Inventors	**05/2017 - ongoing**
World Future Society	**08/2017 - ongoing**

Testimony

Expert Witness (Densys Ltd. v. 3Shape Trios A/S et al.), 03/2021
Senate Committee of the 66th Washington State Legislature (SB 6513: Restricting the use of deepfake audio and visual media in campaigns for elective office), 01/2020
Expert Witness (Rearden LLC et al. v. The Walt Disney Company et al.; Rearden LLC et al. v. Twentieth Century Fox Film Corporation et al.), 09/2018 - 02/2023

BOARD

Tekcapital, Scientific Advisory Board	**08/2017**
European Conference on Visual Media Production, Scientific Advisory Board	**02/2017**
Pinscreen Inc., Board of Director	**10/2015**
Pelican Imaging, Technical Advisory Board	**09/2014 - 11/2016**

EXTRA ACTIVITIES

MBZUAI Incubation and Entrepreneurship Center (MIEC) Mentor Network, Abu Dhabi	**10/2024**
MBZUAI Senior Faculty Retreat, Abu Dhabi	**09/2024**
United Nations AI For Good Global Summit 2024	**05/2024**
MBZUAI AI Quorum: The Future of HCI in the Era of AI	**02/2024**
DARPA ISAT Summer Conference, San Diego	**08/2023**
DARPA ISAT Spring Conference, Virtual	**04/2022**
DARPA ISAT Fall Conference, Virtual	**11/2021**
SPARKS! Serendipity Forum at Cern 2021	**09/2021**
DARPA ISAT Virtual Woods Hole, Woods Hole	**08/2021**
DARPA ISAT Fall Conference, Virtual	**11/2020**
World Economic Forum, Annual Meeting of the Global Future Councils, Virtual	**10/2020**
DARPA ISAT Virtual Woods Hole, Woods Hole	**08/2020**
DARPA ISAT Spring Conference, Arlington	**04/2020**
World Economic Forum, Annual Meeting, Davos	**01/2020**
World Economic Forum, Annual Meeting of the Global Future Councils, Dubai	**11/2019**
DARPA ISAT Summer Conference, Woods Hole	**08/2019**
World Economic Forum, Annual Meeting of the New Champtions, Dalian	**07/2019**
World Economic Forum, Annual Meeting of the Global Future Councils, Dubai	**11/2018**
Lucasfilm Training LDAC, Practical & CG Cinematography, San Francisco	**08/2009**
Credit Suisse Group, Equity Derivatives Workshop, Zurich	**03/2008**
McKinsey&Company, Business Technology Office's European Seminar, Portugal	**05/2007**

TECHNICAL SKILLS

Operating Systems

Mac OS X, Linux/Unix, and Windows

Programming Languages

C/C++, Objective C, Python, Java, and HTML/CSS

Professional Tools

Unity, Autodesk Maya, Autodesk 3ds MAX, Pixologic ZBrush, Zeno, Adobe AfterEffects, Adobe Premiere, Adobe Photoshop, and Adobe Illustrator

MILITARY SERVICE

German Federal Armed Forces **11/1999 - 08/2000**
Division for Special Operations (DSO) - Airborne Brigade 26
2nd Company of the Anti-tank Parachute Battalion 262, Merzig, Germany

- German parachutist badge in bronze

REFERENCES

Prof. Dr. Eric Xing
President and Professor of Machine Learning, Mohamed bin Zayed University of Artificial Intelligence
Professor of Computer Science, Carnegie Mellon University
Co-Founder and Chief Scientist, GenBio AI
Email trevor@eecs.berkeley.edu
Home page http://people.eecs.berkeley.edu/~trevor/

Prof. Dr. Trevor Darrell
Professor of Electrical Engineering and Computer Science, University of California, Berkeley
Email trevor@eecs.berkeley.edu
Home page http://people.eecs.berkeley.edu/~trevor/

Prof. Dr. Leonidas J. Guibas
Paul Pigott Professor of Computer Science and Electrical Engineering, Stanford University
Email guibas@cs.stanford.edu
Home page http://geometry.stanford.edu/

Prof. Dr. Michael J. Black
Director, Max Planck Institute for Intelligent Systems / Perceiving Systems Department
Professor of Computer Science, Universität Tübingen
Email black@tuebingen.mpg.de
Home page http://ps.is.tue.mpg.de

Prof. Dr. Steven Seitz
Robert E. Dinning Professor of Computer Science, University of Washington
Director of Teleportation, Google
Email seitz@cs.washington.edu
Home page https://www.cs.washington.edu/homes/seitz

Prof. Dr. Hany Farid
Professor of Electrical Engineering and Computer Science, University of California, Berkeley
Email hfarid@berkeley.edu
Home page https://farid.berkeley.edu

Prof. Dr. Yaser Ajmal Sheikh
VP, Meta / Reality Labs
Consulting Professor of Computer Science, Carnegie Mellon University
Email yaser@cs.cmu.edu
Home page http://www.cs.cmu.edu/~yaser/

Dr. Chris Bregler
Director / Principal Scientist, Deep Mind
Email bregler@google.com
Home page http://chris.bregler.com/

Kim Libreri
Chief Technology Officer, Epic Games
Email available upon request
Home page http://epicgames.com/