Srinath Sridhar

John E. Savage Assistant Professor, Brown University
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Professional Experience

July 2025– **John E. Savage Assistant Professor of Computer Science, Brown University**, *Providence, USA*.

2020–2025 **Assistant Professor of Computer Science, Brown University**, *Providence, USA*.

Oct 2020– **Amazon Scholar, Amazon Robotics LLC**, *USA*.

Nov 2024– **Kotak Mahindra Bank Visiting Chair Professor, Indian Institute of Science**, *Bengaluru, India*.

2017–2020 **Postdoctoral Researcher, Stanford University**, *Stanford, USA*.
Advisor: Leonidas Guibas. Stanford Artificial Intelligence Laboratory (SAIL).

2015–2016 **Research Intern, Microsoft Research Redmond**, *Seattle, USA*.
Mentor: Shahram Izadi. Interactive 3D Vision (i3D) Group.

Education

2012–2017 **Max Planck Institute for Informatics / Saarland University**, *Saarbruecken, Germany*.
Ph.D. in Computer Science.
Dissertation: "Tracking Hands in Action for Gesture-based Computer Input."
Advisors: Christian Theobalt, Antti Oulasvirta.
Committee: Bernt Schiele, Hao Li, Hans-Peter Seidel (Chair).

2010–2012 **University of Michigan**, *Ann Arbor, USA*.
M.S.E. in Electrical Engineering: Systems.
Major: Computer Vision, Minor: Computer Science.

2006–2010 **College of Engineering Guindy, Anna University**, *Chennai, India*.
B.E. in Geoinformatics.

Awards & Fellowships

2025 **Best Student Paper** award at WACV 2025 (advisee: Rahul Sajnani).

2022 **NSF CAREER** award.

2021 **Judith H. Zern 1964 Endowed Teaching Fund** for course development.

2021 **Outstanding Reviewer**, CVPR 2021.

2021 **Google Research Scholar** Award 2021. The only recipient worldwide in augmented/virtual reality category.

2019 **Best Paper Honorable Mention** at Eurographics 2019.

2018 Selected as a young researcher to participate in the **Heidelberg Laureate Forum 2018**.

2017 **Best Poster Award**, ICCV HANDS Workshop 2017.

2016 Selected to participate in the doctoral consortium and received a **travel grant for CVPR 2016**.

2013 **ACM Student Travel Grant** for CHI 2013.

2012–2016 **Max Planck Fellowship** for PhD studies.

2011–2012 **Rackham International Student Fellowship**, University of Michigan, Ann Arbor.

2009 **Best Project Award**, *Single View Reconstruction of Buildings*, IIT Delhi. ▶

Publications Google Scholar

Ⓟ Ph.D. advisee, Ⓤ Masters/Undergraduate advisee, Ⓥ Visiting Graduate/Undergraduate advisee, * Equal contribution. Icons (▶, 🗎, 𝔤) are hyperlinks to webpages or explanatory videos.

Conference Papers (Peer-reviewed)

2025

[P.46] Hongyu Li, Mingxi Jia, Tuluhan Akbulut, Yu Xiang, George Konidaris, **Srinath Sridhar**. *V-HOP: Visuo-Haptic 6D Object Pose Tracking*. Robotics: Science and Systems Conference (**RSS**) 2025 [**Oral**]. 🗎

[P.45] Aashish Rai, Dilin Wang, Mihir Jain, Nikolaos Sarafianos, Arthur Chen, **Srinath Sridhar**, Aayush Prakash. *UVGS: Reimagining Unstructured 3D Gaussian Splatting using UV Mapping*. Conference on Computer Vision and Pattern Recognition (**CVPR**) 2025. 🗎

[P.44] Kefan Chen*, Chaerin Min*, Linguang Zhang, Shreyas Hampali, Cem Keskin, **Srinath Sridhar**. *FoundHand: Large-Scale Domain-Specific Learning for Controllable Hand Image Generation*. Conference on Computer Vision and Pattern Recognition (**CVPR**) 2025 [**Highlight**]. 🗎

[P.43] Rao Fu*, Dingxi Zhang*, Alex Jiang, Wanjia Fu, Austin Funk, Daniel Ritchie, **Srinath Sridhar**. *GigaHands: A Massive Annotated Dataset of Bimanual Hand Activities*. Conference on Computer Vision and Pattern Recognition (**CVPR**) 2025 [**Highlight**]. 🗎

[P.42] Sudarshan Harithas, **Srinath Sridhar**. *MotionGlot: A Multi-Embodied Motion Generation Model*. IEEE International Conference on Robotics and Automation (**ICRA**) 2025. 🗎

[P.41] Hongyu Li, James Akl, **Srinath Sridhar**, Tye Brady, Taskin Padir. *ViTa-Zero: Zero-shot Visuotactile Object 6D Pose Estimation*. IEEE International Conference on Robotics and Automation (**ICRA**) 2025. 🗎

[P.40] Md Faizal Karim*, Shreya Bollimuntha*, Mohammed Saad Hashmi, Autrio Das, Gaurav Singh, **Srinath Sridhar**, Arun Kumar Singh, Nagamanikandan Govindan, K Madhava Krishna. *DA-VIL: Adaptive Dual-Arm Manipulation with Reinforcement Learning and Variable Impedance Control*. IEEE International Conference on Robotics and Automation (**ICRA**) 2025. 🗎

[P.39] Rahul Sajnani Ⓟ, Jeroen Vanbaar, Jie Min, Kapil Katyal, **Srinath Sridhar**. *GeoDiffuser: Geometry-Based Image Editing with Diffusion Models*. Winter Conference on Applications of Computer Vision (**WACV**) 2025 [**Best Student Paper**]. 🗎

[P.38] Aashish Rai Ⓟ, **Srinath Sridhar**. *EgoSonics: Generating Synchronized Audio for Silent Egocentric Videos*. Winter Conference on Applications of Computer Vision (**WACV**) 2025. 🗎

2024

[P.37] Gaurav Singh* Ⓥ, Sanket Kalwar*, Md Faizal Karim, Bipasha Sen, Nagamanikandan Govindan, **Srinath Sridhar**, K. Madhava Krishna. *Constrained 6-DoF Grasp Generation on Complex Shapes for Improved Dual-Arm Manipulation*. International Conference on Intelligent Robots and Systems (**IROS**) 2024. 🗎

[P.36] Rao Fu Ⓟ, Zehao Wen, Zichen Liu, **Srinath Sridhar**. *AnyHome: Open-Vocabulary Generation of Structured and Textured 3D Homes*. European Conference on Computer Vision (**ECCV**) 2024.

[P.35] Chandradeep Pokhariya Ⓥ, Ishaan N Shah*, Angela Xing* Ⓤ, Zekun Li Ⓟ, Kefan Chen Ⓟ, Avinash Sharma, **Srinath Sridhar**. *MANUS: Markerless Hand-Object Grasp Capture using Articulated 3D Gaussians*. Conference on Computer Vision and Pattern Recognition (**CVPR**) 2024.

[P.34] Cheng-You Lu* Ⓤ, Peisen Zhou* Ⓤ, Angela Xing* Ⓤ, Chandradeep Pokhariya Ⓥ, Arnab Dey Ⓥ, Ishaan N Shah, Rugved Mavidipalli Ⓤ, Dylan Hu Ⓤ, Andrew Comport, Kefan Chen Ⓟ, **Srinath Sridhar**. *DiVa-360: The Dynamic Visual Dataset for Immersive Neural Fields*. Conference on Computer Vision and Pattern Recognition (**CVPR**) 2024 [**Highlight**].

2023

[P.33] Bipasha Sen*, Gaurav Singh*, Aditya Agarwal*, Rohith Agaram, K Madhava Krishna, **Srinath Sridhar**. *HyP-NeRF: Learning Improved NeRF Priors using a HyperNetwork*. Conference on Neural Information Processing Systems (**NeurIPS**) 2023.

[P.32] Yiqing Liang, Eliot Laidlaw, Alexander Meyerowitz, **Srinath Sridhar**, James Tompkin. *Semantic Attention Flow Fields for Dynamic Scene Decomposition*. International Conference on Computer Vision (**ICCV**) 2023.

[P.31] Ankit Dhiman, Srinath R, Harsh Rangwani, Rishubh Parihar, Lokesh R Boregowda, **Srinath Sridhar**, R Venkatesh Babu. *Strata-NeRF: Neural Radiance Fields for Stratified Scenes*. International Conference on Computer Vision (**ICCV**) 2023.

[P.30] Qiuhong Anna Wei Ⓤ, Sijie Ding Ⓤ, Jeong Joon Park, Rahul Sajnani Ⓟ, Adrien Poulenard, **Srinath Sridhar**, Leonidas Guibas. *LEGO-Net: Learning Regular Rearrangements of Objects in Rooms*. Conference on Computer Vision and Pattern Recognition (**CVPR**) 2023.

[P.29] Rohith Agaram Ⓥ, Shaurya Dewan, Rahul Sajnani Ⓟ, Adrien Poulenard, Madhava Krishna, **Srinath Sridhar**. *Canonical Fields: Self-Supervised Learning of Pose-Canonicalized Neural Fields*. Conference on Computer Vision and Pattern Recognition (**CVPR**) 2023 [**Highlight**].

[P.28] Aditya Sanghi, Rao Fu Ⓟ, Vivian Liu, Karl Willis, Hooman Shayani, Amir Hosein Khasahmadi, **Srinath Sridhar**, Daniel Ritchie. *CLIP-Sculptor: Zero-Shot Generation of High-Fidelity and Diverse Shapes from Natural Language*. Conference on Computer Vision and Pattern Recognition (**CVPR**) 2023.

[P.27] Bipasha Sen*, Aditya Agarwal*, Gaurav Singh*, Brojeshwar B., **Srinath Sridhar**, Madhava Krishna. *SCARP: 3D Shape Completion in ARbitrary Poses for Improved Grasping*. IEEE International Conference on Robotics and Automation (**ICRA**) 2023.

2022

[P.26] Rao Fu Ⓟ, Xiao Zhan Ⓤ, Yiwen Chen Ⓤ, Daniel Ritchie, **Srinath Sridhar**. *ShapeCrafter: A Recursive Text-Conditioned 3D Shape Generation Model*. Conference on Neural Information Processing Systems (**NeurIPS**) 2022.

[P.25] Xianghao Xu, Yifan Ruan, **Srinath Sridhar**, Daniel Ritchie. *Unsupervised Kinematic Motion Detection for Part-segmented 3D Shape Collections*. ACM Transactions on Graphics (**SIGGRAPH**) 2022.

[P.24] Rahul Sajnani Ⓥ, Adrien Poulenard, Jivitesh Jain, Radhika Dua, Leonidas J. Guibas, **Srinath Sridhar**. *ConDor: Self-Supervised Canonicalization of 3D Pose for Partial Shapes*. Conference on Computer Vision and Pattern Recognition (**CVPR**) 2022.

[P.23] Yiheng Xie Ⓤ, Towaki Takikawa, Shunsuke Saito, Or Litany, Shiqin Yan, Numair Khan, Federico Tombari, James Tompkin, Vincent Sitzmann[+], **Srinath Sridhar**[+]. *Neural Fields in Visual Computing and Beyond*. Eurographics State of the Art Report (**Eurographics STAR**) 2022 [[+] indicates equal advising].

2021

[P.22] Davis Rempe Ⓟ, Tolga Birdal, Aaron Hertzmann, Jimei Yang, **Srinath Sridhar**, Leonidas J. Guibas. *HuMoR: 3D Human Motion Model for Robust Pose Estimation*. International Conference on Computer Vision (**ICCV**) 2021 [**oral presentation**].

[P.21] Rahul Sajnani Ⓥ, AadilMehdi Sanchawala Ⓥ, Krishna Murthy Jatavallabhula, **Srinath Sridhar**, K. Madhava Krishna. *DRACO: Weakly Supervised Dense Reconstruction and Canonicalization of Objects*. International Conference on Robotics and Automation (**ICRA**) 2021.

[P.20] Zhangsihao Yang Ⓥ, Or Litany, Tolga Birdal, **Srinath Sridhar**, Leonidas J. Guibas. *Continuous Geodesic Convolutions for Learning on 3D Shapes*. Winter Conference on Applications of Computer Vision (**WACV**) 2021.

[P.19] Or Litany, Ari Morcos, **Srinath Sridhar**, Leonidas J. Guibas, Judy Hoffman. *Representation Learning Through Latent Canonicalizations*. Winter Conference on Applications of Computer Vision (**WACV**) 2021.

2020

[P.18] Davis Rempe Ⓟ, Tolga Birdal, Yongheng Zhao, Zan Gojcic, **Srinath Sridhar**, Leonidas J. Guibas. *CaSPR: Learning Canonical Spatiotemporal Point Cloud Representations*. Conference on Neural Information Processing Systems (**NeurIPS**) 2020.

[P.17] Jiahui Lei Ⓥ, **Srinath Sridhar**, Paul Guerrero, Minhyuk Sung, Niloy Mitra, Leonidas J. Guibas. *Pix2Surf: Learning Parametric 3D Surface Models of Objects from Images*. European Conference on Computer Vision (**ECCV**) 2020.

[P.16] Davis Rempe Ⓟ, **Srinath Sridhar**, He Wang, Leonidas J. Guibas. *Predicting the Physical Dynamics of Unseen 3D Objects*. Winter Conference on Applications of Computer Vision (**WACV**) 2020.

2019

[P.15] **Srinath Sridhar**, Davis Rempe Ⓟ, Julien Valentin, Sofien Bouaziz, Leonidas J. Guibas. *Multiview Aggregation for Learning Category-Specific Shape Reconstruction*. Conference on Neural Information Processing Systems (**NeurIPS**) 2019.

[P.14] He Wang Ⓟ, **Srinath Sridhar**, Jingwei Huang, Julien Valentin, Shuran Song, Leonidas J. Guibas. *Normalized Object Coordinate Space for Category-Level 6D Object Pose and Size Estimation*. Conference on Computer Vision and Pattern Recognition (**CVPR**) 2019 [**oral presentation**].

[P.13] Davis Rempe Ⓟ, **Srinath Sridhar**, He Wang, Leonidas J. Guibas. *Learning Generalizable Physical Dynamics of 3D Rigid Objects*. Workshop on 3D Scene Understanding for Vision, Graphics and Robotics, **CVPRW** 2019.

[P.12] He Wang* Ⓟ, Soeren Pirk*, Ersin Yumer, Vladimir Kim, Ozan Sener, **Srinath Sridhar**, Leonidas J. Guibas. *Learning a Generative Model for Multi-Step Human-Object Interactions from Videos*. **Eurographics** 2019. (* equal contribution) [**best paper honorable mention**]

2018

[P.11] Dushyant Mehta, Oleksandr Sotnychenko, Franziska Mueller Ⓟ, Weipeng Xu, **Srinath Sridhar**, Gerard Pons-Moll, Christian Theobalt. *Single-Shot Multi-Person 3D Body Pose Estimation From Monocular RGB Input*. **3DV** 2018.

[P.10] Franziska Mueller Ⓟ, Florian Bernard, Oleksandr Sotnychenko, Dushyant Mehta, **Srinath Sridhar**, Dan Casas, Christian Theobalt. *GANerated Hands for Real-time 3D Hand Tracking from Monocular RGB*. Conference on Computer Vision and Pattern Recognition (**CVPR**) 2018.

2017

[P.9] Franziska Mueller Ⓟ, Dushyant Mehta, Oleksandr Sotnychenko, **Srinath Sridhar**, Dan Casas, Christian Theobalt. *Real-time Hand Tracking under Occlusion from an Egocentric RGB-D Sensor*. International Conference on Computer Vision (**ICCV**) 2017.

[P.8] Dushyant Mehta, **Srinath Sridhar**, Oleksandr Sotnychenko, Helge Rhodin, Mohammad Shafiei, Hans-Peter Seidel, Weipeng Xu, Dan Casas, Christian Theobalt. *VNect: Real-time 3D Human Pose Estimation with a Single RGB Camera*. ACM Transactions on Graphics (**SIGGRAPH**) 2017.

[P.7] **Srinath Sridhar**, Anders Markussen, Antti Oulasvirta, Christian Theobalt, Sebastian Boring. *WatchSense: On- and Above-Skin Input Sensing through a Wearable Depth Sensor*. SIGCHI Conference on Human Factors in Computing Systems (**CHI**) 2017.

2016

[P.6] **Srinath Sridhar**, Franziska Mueller Ⓟ, Michael Zollhöfer, Dan Casas, Antti Oulasvirta, Christian Theobalt. *Real-time Joint Tracking of a Hand Manipulating an Object from RGB-D Input*. European Conference on Computer Vision (**ECCV**) 2016.

2015

[P.5] **Srinath Sridhar**, Franziska Mueller Ⓟ, Antti Oulasvirta, Christian Theobalt. *Fast and Robust Hand Tracking Using Detection-Guided Optimization*. Conference on Computer Vision and Pattern Recognition (**CVPR**) 2015.

[P.4] **Srinath Sridhar**, Anna Maria Feit, Christian Theobalt, Antti Oulasvirta. *Investigating the Dexterity of Multi-Finger Input for Mid-Air Text Entry*. SIGCHI Conference on Human Factors in Computing Systems (**CHI**) 2015.

2014

[P.3] **Srinath Sridhar**, Helge Rhodin, Hans-Peter Seidel, Antti Oulasvirta, Christian Theobalt. *Real-time Hand Tracking Using a Sum of Anisotropic Gaussians Model*. International Conference on 3D Vision (**3DV**) 2014 [**oral presentation**].

2013

[P.2] **Srinath Sridhar**, Antti Oulasvirta, Christian Theobalt. *Interactive Markerless Articulated Hand Motion Tracking using RGB and Depth Data*. International Conference on Computer Vision (**ICCV**) 2013.

[P.1] Victor Ng-Thow-Hing, Karlin Bark, Lee Beckwith, Cuong Tran, Rishabh Bhandari, **Srinath Sridhar**. *User-Centered Perspectives for Automotive Augmented Reality*. International Symposium on Mixed and Augmented Reality (**ISMAR**) 2013.

Other Papers, Posters, Technical Reports, and Blog Posts

[O.9] Ge Zhang, Or Litany, **Srinath Sridhar**, Leonidas J. Guibas. *StrobeNet: Category-Level Multiview Reconstruction of Articulated Objects*. **arXiv**, 2021.

[O.8] **Srinath Sridhar**. *Learning to Generate Human–Object Interactions*. Stanford AI Lab Blog, 2019.

[O.7] **Srinath Sridhar**, Gilles Bailly, Elias Heydrich, Antti Oulasvirta, Christian Theobalt. *FullHand: Markerless Skeleton-based Tracking for Free-Hand Interaction*. MPI-I-2016-4-002. Saarbrücken: Max-Planck-Institut für Informatik 2016.

[O.6] Anna Maria Feit, **Srinath Sridhar**, Christian Theobalt, Antti Oulasvirta. *Investigating Multi-Finger Gestures for Mid-Air Text Entry*. Womencourage 2015.

[O.5] Anna Maria Feit, Myroslav Bachynskyi, **Srinath Sridhar**. *Towards Multi-Objective Optimization for UI Design*. Workshop on Principles, Techniques and Perspectives on Optimization and HCI, **CHI** 2015.

[O.4] **Srinath Sridhar**, Antti Oulasvirta, Christian Theobalt. *Fast Tracking of Hand and Finger Articulations Using a Single Depth Camera*. MPI-I-2014-4-002. Saarbrücken: Max-Planck-Institut für Informatik 2014.

[O.3] **Srinath Sridhar**. *HandSonor: A Customizable Vision-based Control Interface for Musical Expression*. SIGCHI Conference on Human Factors in Computing Systems (**CHI**) 2013.

[O.2] **Srinath Sridhar**, Victor Ng-Thow-Hing. *Generation of Virtual Display Surfaces for In-vehicle Contextual Augmented Reality*. International Symposium on Mixed and Augmented Reality (**ISMAR**) 2012.

[O.1] **Srinath Sridhar**, Vineet Kamat. *CAMFPLAN: A Real-time Markerless Camera Pose Estimation System for Augmented Reality*. UMCEE Report No. 11-01, Department of Civil and Environmental Engineering, University of Michigan, Ann Arbor 2012.

Patents

[A.1] Victor Ng-Thow-Hing, **Srinath Sridhar**. *Method to Generate Virtual Display Surfaces from Video Imagery of Road based Scenery*. U.S. Patent, US9135754 B2, 2015. Licensed by Honda Motor Co., Ltd.

Mentorship

Doctoral Students

2025– • Gaurav Singh, Computer Science, Brown University

2024– • Xiaoyan Cong, Computer Science, Brown University
Interned at TikTok.

2023– • Sudarshan Harithas, Computer Science, Brown University
Interned at General Robotics.

2023– • Hongyu Li, Computer Science, Brown University
Interned at Amazon and RAI Institute.

2023– • Zekun Li, Computer Science, Brown University
Interned at Honda Research Institute and Meta.

2023– • Chaerin Min, Computer Science, Brown University
Interned at Google.

2023– • Aashish Rai, Computer Science, Brown University
Interned at Meta.

2022– • Kefan Chen, Computer Science, Brown University

Interned at Meta and Waymo.

2022– • Rahul Sajnani, Computer Science, Brown University

Interned at Amazon and Adobe.

2021– • Rao Fu, Computer Science, Brown University

Interned at Autodesk and Meta.

Former

2019–2020 • Davis Rempe, Stanford University (co-advised with Leo Guibas)

Resulting publications [P.22, P.18, P.16, P.13]. Received an Nvidia Graduate Fellowship, interned at Adobe Research and Nvidia Research. Next: Research Scientist at Nvidia Research.

2017–2019 • He Wang, Stanford University (co-advised with Leo Guibas)

Resulting publications [P.14, P.12]. Interned at Google, Facebook AI Research. Next: Assistant Professor at Peking University, and CTO at Galbot.

2015–2017 • Franziska Mueller, MPI Informatics (co-advised with Christian Theobalt)

Resulting publications [P.10, P.9]. Received a Google Ph.D. Fellowship, interned at Facebook Reality Labs. Next: Research Scientist at Google Research Zurich.

Postdoctoral Researchers

2024– • Tao Lu, Computer Science, Brown University

Undergraduate/Masters Students and Visitors

2024– • Patrick Ortiz, Brown University

2024– • Arman Mohammadi, Brown University

2023– • Wanjia Fu, Brown University

2022– • Angela Xing, Brown University

2022– • Theo McArn, Brown University

Former

2023–2024 • Caroline Zhang, Brown University

2021–2024 • Qiuhong (Anna) Wei, Brown University

Next: PhD student at CMU.

CRA Outstanding Undergraduate Researcher Honorable Mention.

Randy F. Pausch Undergraduate Summer Research Award.

Norman K. Meyrowitz Award for Outstanding Departmental Service

2023 • Chandradeep Pokhariya, IIIT Hyderabad

Next: IIT Delhi.

Ritesh Tiwari Outstanding MS Thesis Award, IIIT Hyderabad.

2023–2024 • Dingxi Zhang,

2023 • Dylan Hu, Brown University

Next: Microsoft, World Labs.

2022–2023 • Peisen Zhou, Computer Science, Brown University

2022–2023 • Yiwen Chen, Computer Science, Brown University
Next: PhD student at Northeastern University.

2022–2023 • Cheng-You Lu, Computer Science, Brown University
Next: PhD student at Northeastern University.

2022–2023 • Rugved Mavidipalli, Computer Science, Brown University

2022–2023 • Jacob Frausto, Brown University
Next: Masters student at Stanford University.

2022–2023 • Xiao (Sean) Zhan, Brown University (co-advised with Daniel Ritchie)
Next: PhD student at MIT.

2021–2022 • Trevor Houchens, Computer Science, Brown University
Next: AI/ML Research Engineer at Aurora Flight Sciences.

2021–2022 • Sijie Ding, Computer Science, Brown University
Next: PhD student at Stony Brook University.

2021–2022 • Rahul Sajnani, IIIT Hyderabad
Resulting publications [P.21, P.24]. Next: PhD student at Brown.

2021 • Jivitesh Jain, IIIT Hyderabad

2021 • Yiheng Xie, Brown University
Resulting publication [P.23]. Next: PhD student at Caltech.

2020–2021 • Radhika Dua, KAIST

2020–2021 • Ge Zhang, ShanghaiTech (co-advised with Leo Guibas and Or Litany)
Resulting report [O.9]. Next: Masters student at the University of Michigan, Ann Arbor.

2019–2020 • Jiahui Lei, Zhejiang University (co-advised with Leo Guibas)
Resulting publication [P.17]. Next: PhD student at UPenn.

2019 • Zhangsihao Yang, CMU
Resulting publication [P.20].

Ph.D. Defense/Exam/Proposal Committee

Dec 2024 • Xianghao Xu, Brown University

Sep 2024 • Arnab Dey, Université Côte d'Azur

Aug 2024 • Shishira Raghunath Maiya, University of Maryland at College Park
Expected to graduate 2025.

Apr 2024 • Thao Nguyen, Brown University

Aug 2023 • Walter Goodwin, Wolfson College, Oxford University

Apr 2023 • Kai Wang, Computer Science, Brown University

Aug 2022 • Hongyi Fan, Engineering, Brown University

Aug 2022 • Matthew Corsaro, Computer Science, Brown University

Teaching

At Brown

Fall 2021, 2022, Spring 2024 **Introduction to Computer Vision (CSCI 1430)**.
Enrollment: 103 (2021), 99 (2022), 160 (2024). Taught the introductory computer vision course at Brown for undergraduates and graduate students.

Spring 2022, 2023 **A Practical Introduction to Advanced Robot Perception (CSCI 2952-O)**.
Enrollment: 19 (2022), 18 (2023). Designed and taught a graduate-level course on 3D computer vision and machine learning for robotics.

Spring 2021 **Introduction to Computer Vision (CSCI 1430)**.
Enrollment: 218. Co-taught (with James Tompkin) undergraduate course on computer vision.

Fall 2020 **Topics in 3D Computer Vision and Machine Learning (CSCI 2952-K)**.
Enrollment: 18. Designed and taught a graduate-level course on 3D computer vision and machine learning.

Before Brown

2013–2016 **Course Assistant, Graduate Seminar on Computer Vision for Computer Graphics**, *Saarland University*.
Graded student work, participated in all discussions, held office hours, and provided individual feedback.

2013 **Lecturer, EIT ICT Smart Spaces Summer School**, *INRIA, Grenoble*.
Day-long workshop on "3D Interaction using Hand Motion Tracking" for advanced graduate students.

Recent Invited Talks & Courses

January 2024 **Adobe Research**, *Generative Modelling for 3D Multimodal Interaction Understanding* , Bengaluru, India.

January 2024 **Indian Institute of Science (IISc)**, *Short Course on Radiance Fields in Visual Computing and Artificial Intelligence*, Bengaluru, India.

December 2024 **The AI Institute**, *Towards Robot Understanding of Human Physical Skills*, Boston, MA.

November 2024 **Carnegie Mellon University & Meta Reality Labs**, *Generative Modelling for 3D Multimodal Understanding of Human Physical Interactions*, Pittsburgh, PA.

June 2024 **Workshop on Implicit Neural Representation for Vision, CVPR**, *Implicit Representations of the Interactive 4D World*, Seattle, WA.

June 2024 **Second Workshop on Compositional 3D Vision, CVPR**, *Compositional 3D Understanding and Editing*, Seattle, WA.

June 2024 **CVPR Area Chair Workshop**, *Machine Understanding of the Interactive 4D World*, Seattle, WA.

February 2024 **Indian Institute of Technology Bombay**, *Machine Understanding of Interactive Scenes*, Mumbai, India.

December 2023 **Distinguished Speaker at the 30th Anniversary of the Max Planck Institute for Informatics**, *Towards Robot Understanding of Human Manual Skills* ▶, Saarbruecken, Germany.

November 2023 **Max Planck Institute for Intelligent Systems**, *Towards Robot Understanding of Human Manual Skills*, Tuebingen, Germany.

July 2023 **BIRS Workshop on 3D Generative Models**, *Building Multimodal Datasets for Immersive Neural Fields*, Banff, Canada.

June 2023 **Plenoptima Summer School**, *Neural Fields in 3D Computer Vision*, Rennes, France.

June 2023 **CVPR O-DRUM Workshop**, *Multimodal Dynamic 3D Understanding*, Vancouver, Canada.

May 2023 **University of Maryland**, *Foundation Models and 3D Computer Vision*, College Park, MD.

March 2023 **Panelist**, *Workshop on Virtual, Augmented, and Mixed-Reality for Human-Robot Interactions at HRI 2023*, Stockholm, Sweden (remote).

January 2023 **KCIS Lecture, IIIT Hyderabad**, *Learning to Generate, Edit, and Arrange 3D Object Shapes*, Hyderabad, India.

January 2023 **Indian Institute of Science (IISc)**, *Learning to Generate, Edit, and Arrange 3D Object Shapes*, Bengaluru, India.

Service

Service to the Field

Area Chair CVPR (2024–), ICCV (2023–), ECCV (2024), SIGGRAPH Asia (2023, 2024 - COI Coordinator), IEEE VR Conference Track (2020)

Grant Panelist/Reviewer NSF (2021, 2022, 2024), Israel Science Foundation (2023)

Program Committee SIGGRAPH Posters Jury (2022), Eurographics Short Papers (2018), Graphics Replicability Stamp Initiative (2019–2021), and various workshops at CVPR (2015–2016, 2018–2019), ICCV (2017, 2019) and ECCV (2018).

Organizer Workshop on Neural Fields across Fields: Methods and Applications of Implicit Neural Representations (ICLR 2023), Tutorial on Neural Fields in Computer Vision at CVPR 2022, 3DReps Workshop at ECCV (2020), ICCV (2021)

Mentor Summer Geometry Initiative (SGI 2022)

Reviewer CVPR, ICCV, ECCV, NeurIPS, TMLR, AAAI, BMVC, TPAMI, SIGGRAPH Asia, Eurographics, CHI, UIST, IMWUT/Ubicomp, IROS, ICRA, CVIU, 3DV, FG, Computer, IEEE VR, ACM ISS, Computing Surveys, IEEE CGA, ICLR.

Service to Brown

Chair Ph.D. Admissions Committee (2024)

Member Ph.D. Admissions Committee (2021–2023)

Mentor exploreCSR/NSF REU, a semester-long research experience program for underrepresented undergraduates (exploreCSR: 2021–, NSF REU: 2022–).

Judge Hack@Brown 2021

Selected Press

Robin.ly CVPR 2019 Paper Discussion, Robin.ly, July 30, 2019.

Samsung "Here's how to design a robot that can cook", Samsung NEXT Blog, April 30, 2019.

SR TV "VNect", Saarländischer Rundfunk (German State TV), June 21, 2017.

SR TV "WatchSense", Saarländischer Rundfunk (German State TV), May 21, 2017.

IEEE "Control Your Smartwatch without Touching It", IEEE Electronics 360, May 4, 2017.

ECE News "Student teams earn prizes in EECS 556: Image Processing", Michigan EECS, April 29, 2011.