

EDUCATION	<div>University of Michigan, Ann Arbor, USA</div> <div>Sept. 2019 - April 2024 (Expected)</div> <div>Ph.D. in Computer Science, EECS</div> <div>• Advisors: Prof. David Fouhey, Prof. Justin Johnson</div> <div>Carnegie Mellon University, Pittsburgh, USA</div> <div>Aug. 2017 - Aug. 2019</div> <div>Masters in Robotics, Robotics Institute, School of Computer Science</div> <div>• CGPA: 4.05/4.0</div> <div>• Advisor: Prof. Abhinav Gupta</div> <div>Indian Institute of Technology Bombay, Mumbai, India</div> <div>Jul. 2011 - Jul. 2015</div> <div>Bachelor of Technology (B.Tech), Computer Science and Engineering with Honours</div> <div>• CGPA: 8.77/10</div> <div>• Minor in Electrical Engineering</div> <div>• Advisor: Prof. Suyash Awate, Prof. Ganesh Ramakrishnan</div>
INTERESTS	<div>My research interests are to understand and learn the 3D structure to enable human-object (and robot) interactions in the visual world with minimal supervision from images, and raw data.</div>
PROFESSIONAL EXPERIENCE	<div>Waymo Research, Mountain View, CA</div> <div>Jun. 2023 - Aug 2023</div> <div>Research Intern, Preception Research</div> <div>Xinchen Yan and Charles Qi</div> <div>Google Research, Mountain View, CA</div> <div>May. 2022 - Dec 2022</div> <div>Research Intern, Scene Understanding Team</div> <div>Prof. Leonidas Guibas</div> <div>Samsung Research, Seoul, South Korea</div> <div>Sept. 2015 - Jun. 2017</div> <div>Research Engineer, AI Lab</div> <div>Prof. Jihie Kim</div>
PUBLICATIONS	<div>NIFTY: Neural Object Interaction Fields for Guided Human Motion Synthesis</div> <div>Nilesh Kulkarni, Davis Rempe, Kyle Genova, Abhijit Kundu, Justin Johnson, David F. Fouhey, Leonidas Guibas</div> <div>Arxiv, 2023</div> <div>Learning to Predict Scene-Level Implicit 3D from Posed RGBD Data</div> <div>Nilesh Kulkarni, Linyi Jin, Justin Johnson, David F. Fouhey</div> <div>CVPR, 2023</div> <div>What's Behind the Couch? Directed Ray Distance Functions (DRDF) for 3D Scene Reconstruction</div> <div>Nilesh Kulkarni, Justin Johnson, David F. Fouhey</div> <div>ECCV, 2022</div> <div>Collision Replay: What does bumping into things tell you about the scene geometry?</div> <div>Alexander Raistrick, Nilesh Kulkarni, David F. Fouhey</div> <div>BMVC, 2021 (Oral)</div> <div>Implicit mesh reconstruction from unannotated image collections</div> <div>Shubham Tulsiani, Nilesh Kulkarni, Abhinav Gupta</div> <div>Preprint, 2021</div> <div>Articulation-Aware Canonical Surface Mapping</div> <div>Nilesh Kulkarni, Abhinav Gupta, David F. Fouhey, Shubham Tulsiani</div> <div>CVPR, 2020</div> <div>Canonical Surface Mapping via Geometric Cycle Consistency</div> <div>Nilesh Kulkarni, Abhinav Gupta*, Shubham Tulsiani*</div> <div>ICCV, 2019</div> <div>3D-RelNet: Joint Object and Relational Network for 3D Prediction</div> <div>Nilesh Kulkarni, Ishan Misra, Shubham Tulsiani, Abhinav Gupta</div> <div>ICCV, 2019</div> <div>On-Device Neural Language Model based Word Prediction</div> <div>Seunghak Yu*, Nilesh Kulkarni*, Haejun Lee, Jihie Kim</div>

27th International Conference on Computational Linguistics: System Demonstrations (COLING 2018)
[Syllable-level Neural Language Model for Agglutinative Language](#)
Seunghak Yu*, **Nilesh Kulkarni***, Haejun Lee, Jihie Kim
Empirical Methods in Natural Language Processing, Workshop on Subword and Character Level Models, (EMNLP 2017)
[Robust Kernel Principal Nested Spheres](#)
Suyash Awate*, Manik Dhar*, **Nilesh Kulkarni***
23rd International Conference on Pattern Recognition (ICPR 2016)
[Research and Development of Matsya 4.0, Autonomous Underwater Vehicle](#)
Technical Report, International Robosub Competition, 2015
* – Shared Authorship

ACHIEVEMENTS • Secured an **All India Rank 77** in IITJEE-2011 (amongst 0.5 million students)
• Certified as among the **Top 1%** in India, in the Indian National Chemistry Olympiad and Indian National Physics Olympiad, 2011
• Awarded Institute Technical Color (**7** among 9000), 2014
• Awarded Institute Technical Special Mention (**15** among 9000), 2013
• Awarded the Tata Welfare Trust Scholarship for Graduate Studies, 2017

PROFESSIONAL SERVICE Reviewer
• CVPR 2020, 2021, 2022, 2023
• ECCV/ICCV 2019, 2020, 2022
• NeurIPS 2020, 2021
• 3DV 2019, 2022
• AI4ALL 2021
