

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

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| ACHIEVEMENTS | <ul style="list-style-type: none">• 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 |
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| PROFESSIONAL SERVICE | <u>Reviewer</u> <ul style="list-style-type: none">• CVPR 2020, 2021, 2022, 2023• ECCV/ICCV 2019, 2020, 2022• NeurIPS 2020, 2021• 3DV 2019, 2022• AI4ALL 2021 |
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