

# Anwesan Pal

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## Work Experience

- Jan 2024 – . . . . . **Applied Scientist**, AWS, Amazon.
- Sep 2018 – Dec 2023 **Graduate Research Assistant**, Department of CSE, UC San Diego.
- Jun – Sep, 2023 **Applied Scientist Intern**, Alexa AI-NU, Amazon.
- Jun – Sep, 2022 **Applied Scientist Intern**, Alexa AI-NU, Amazon.
- Jun – Sep, 2021 **Research Intern**, Android Pixel Camera, Google.
- Jun – Sep, 2018 **Summer Research Fellow**, Department of ECE, UC San Diego.

## Education

- 2019 – 2023 **Ph.D. in Computer Science and Engineering**, UC San Diego.  
Dissertation title: *Hybrid semantic models for building smart and robust home robots.*
- 2017 – 2019 **M.S. in Electrical and Computer Engineering**, UC San Diego.  
Thesis title: *Learning Application-Oriented Classifiers for Multi-frame Visual Recognition.*
- 2013 – 2017 **B.E. in Electrical Engineering**, IEST Shibpur.  
Thesis title: *Fabrication of Prototype Apparatus for Control Systems Laboratory Experiment.*

## Research Publications

### Accepted

- 1 S. Iyer, **A. Pal**, J. Hu, A. Adeleye, A. Aggarwal, and H. I. Christensen, “Household navigation and manipulation for everyday object rearrangement tasks,” in *International Conference on Robotic Computing (IRC)*, IEEE, Laguna Hills, CA, Dec. 2023.
- 2 **A. Pal**, S. Wadhwa, A. Jaiswal, X. Zhang, Y. Wu, *et al.*, “FashionNTM: Multi-turn Fashion Image Retrieval via Cascaded Memory,” in *International Conference on Computer Vision (ICCV)*, IEEE/CVF, Paris, France, Oct. 2023.
- 3 S. Madhavan, **A. Pal**, and H. I. Christensen, “Role of reward shaping in object-goal navigation,” in *Workshop on Embodied AI, Conference on Computer Vision and Pattern Recognition (CVPR)*, IEEE/CVF, New Orleans, LA, Jun. 2022.
- 4 **A. Pal**, S. Mondal, and H. I. Christensen, “Looking at the right stuff – guided semantic-gaze for autonomous driving,” in *Conference on Computer Vision and Pattern Recognition (CVPR)*, IEEE/CVF, Seattle, WA, Jun. 2020.
- 5 **A. Pal**, Y. Qiu, and H. I. Christensen, “Learning hierarchical relationships for object-goal navigation,” in *Conference on Robot Learning (CoRL)*, Cambridge, MA, Nov. 2020.
- 6 **A. Pal**, C. Nieto, and H. I. Christensen, “DEDUCE: Diverse scene detection methods in unseen challenging environments,” in *International Conference on Intelligent Robots and Systems (IROS)*, IEEE/RSJ, Macau, China, Oct. 2019.

### Ongoing

- 1 **A. Pal**, A. Padmakumar, X. Gao, G. Sukhatme, H. I. Christensen, *et al.*, “Observe, Infer, and Act: Personalized helper agents for home-robot tasks,” 2024.

## Skills

Theory	■	Non-linear optimization, Probability & Statistics, Linear algebra.
Coding	■	Python, Matlab, C/C++, $\LaTeX$ .
Deep Learning	■	PyTorch, TensorFlow, Keras, Caffe, Simulink.
Operating Systems	■	Linux, Windows, MacOS, Robot Operating System (ROS).
Languages	■	Strong reading, writing and speaking competencies in English, Hindi and Bengali.
Misc.	■	Academic research, teaching, consultation and publishing.

## Miscellaneous Experience

### Awards and Achievements

- 2019 ■ Awarded Graduate Fellowship for Doctoral study by the CSE Department at UC San Diego
- 2018 ■ Awarded Summer Research Fellowship by the ECE Department at UC San Diego to conduct research in a laboratory environment
- 2017 ■ Only student in the batch to be a Teaching Assistant for a graduate-level course in the ECE Department in the first quarter in UC San Diego
- 2014 ■ Stood 2nd in WIRED-IN – the Electrical/Electronics Design contest held in INSTRUO 2015, technical festival of IEST, Shibpur
- 2011 ■ Attained perfect CGPA of 10.0 (out of 10) in class X (top 5% in the nation). Received Scholarship and Letter of Recognition from Minister of Education, Govt. of India

### Workshop Organization

- 2022 ■ Co-organizer, Language Assisted Product Retrieval Challenge in the Instance-Level Recognition Workshop at ECCV'22

### Reviewer Services

- 2024- ■ IEEE/CVF Conference on Computer Vision and Pattern Recognition
- 2023-2024 ■ Student Reviewer at UCSD Dept. of CSE Doctoral Admission
- 2023- ■ International Journal of Robotics Research
- Springer Autonomous Robots
- IEEE Transactions on Neural Networks and Learning Systems
- 2022- ■ IEEE Robotics and Automation Letters
- 2021- ■ IEEE International Conference on Robotics and Automation
- 2020- ■ IEEE/RSJ International Conference on Intelligent Robots and Systems

## References

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