# Anwesan Pal

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https://anwesanpal.github.io/


## Work Experience

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|---|---|
| Sep 2018 – · · · · | **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. |
| May – Jul, 2016 | **Research Intern,** Paris VIII University. |
| May – Jun, 2015 | **Research Intern,** BITS Pilani Goa Campus. |

## Education

2019 – 2023 (expected) **Ph.D. in Computer Science and Engineering,** UC San Diego.
Thesis title: *Hybrid Semantic Models for Robust Robot Navigation.*

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,** IIEST Shibpur.
Thesis title: *Fabrication of Prototype Apparatus for Control Systems Laboratory Experiment.*

## Research Publications

### Accepted

1. **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.
2. 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.
3. **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.
4. **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.
5. **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. S. Iyer, **A. Pal**, J. Hu, A. Adeleye, A. Aggarwal, and H. I. Christensen, "Long-term navigation and manipulation for everyday household clean-up," 2023.

2 **A. Pal**, A. Padmakumar, X. Gao, G. Sukhatme, H. I. Christensen, *et al.*, "Observe, Infer, and Act: Personalized helper agents for home-robot tasks," 2023.

## Skills

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| 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 IIEST, 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

- 2023- 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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