Anwesan Pal

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🌐 https://anwesanpal.github.io/

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

Research Publications

Accepted

1. **A. Pal**, R. Bhargava, K. Hinsz, J. Esterhuizen, and S. Bhattacharya, "The empirical impact of data sanitization on language models," in *Safe Generative AI Workshop at Neural Information Processing Systems (NeurIPS) 2024*, Vancouver, Canada, Dec. 2024.

2. 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.

3. **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.

4. 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.

5. **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.

6. **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.

7. **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 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

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

Henrik I. Christensen	Gaurav Sukhatme	Yue (Rex) Wu
Professor	Professor	Principal Applied Scientist
Department of CSE	Department of CS & ECE	Alexa AI Natural Understanding
UC San Diego	USC	Amazon
hichristensen@ucsd.edu	gaurav@usc.edu	wuayue@amazon.com