Preetam Dammu

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EDUCATION

| Doctor of Philosophy, Information Science University of Washington, Seattle, Washington Advisor: Prof. Chirag Shah Recipient of the UW Top Scholar Fellowship | 2022 - Present |
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| Master of Technology, Artificial Intelligence University of Hyderabad, Hyderabad, India Advisor: <u>Prof. Raju S. Bapi</u> Recipient of the Department's Gold Medal (1st Rank) | 2017 - 2019 |
| RESEARCH EXPERIENCE | |
| Amazon Science Applied Scientist II Intern Intern in Search Experience Science team. Projects focused on Generative Agents. | June 2024 – Sep 2024 |
| Amazon Science Applied Scientist II Intern Intern in AlexaShopping / Nile Research team. Projects focused on LLMs and Evidence Attribution in NLG. | June 2023 – Sep 2023 |
| UW iSchool Graduate Research Assistant Member of <u>RAISE</u> and <u>InfoSeeking Lab</u>. Research focused on Generative AI (Agents, VLMs & LLMs). | Sep 2022 - Present |
| TCS Research & Innovation Labs Researcher Member of the "Secure and Private AI" research team Projects focused on solving security-related technological barriers to AI adop | Aug 2019 – Sep 2022 tion. |
| Computational Intelligence Lab, UoH Graduate Student Researcher Conducted reasearch in the intersection of Cognitive Neuroscience and ML. Employed machine learning techniques to model and detect neurological dis | Sep 2017 – Sep 2019 orders. |

- Generative AI: Agents, VLMs & LLMs
- Responsible AI: Explainability, Fairness, Robustness, Security & Privacy
- Information Retrieval
- Natural Language Processing
- Computer Vision

RESEARCH PUBLICATIONS

- **1) Dammu**, et al. A Shopping Agent for Addressing Subjective Product Needs. Proceedings of the 18th ACM International Conference on Web Search and Data Mining (WSDM 2025).
- 2) Dammu et al. "They are uncultured": Unveiling Covert Harms and Social Threats in LLM Generated Conversations. *Proceedings of the 2024 Conference on Empirical Methods in Natural Language Processing (EMNLP 2024)*. <u>Paper Link</u>.
- **3)** Dammu et al. ClaimVer: Explainable Claim-Level Verification and Evidence Attribution of Text Through Knowledge Graphs. *Findings of the 2024 Conference on Empirical Methods in Natural Language Processing* (EMNLP Findings 2024). <u>Paper Link</u>.
- **4)** Dammu and Alonso. "Near-duplicate Question Detection". *Companion Proceedings of the ACM on Web Conference (WebConf 2024)*. Paper Link.
- 5) Alonso, **Dammu**, & Yang. An Interpretable Answer Scoring Framework. *The Second Workshop on Generative Information Retrieval* (SIGIR Workshop 2024). <u>Paper Link</u>.
- 6) Dammu and Shah. "Detecting Spurious Correlations via Robust Visual Concepts in Real and Al-Generated Image Classification". *37th Conference on Neural Information Processing Systems* (*NeurIPS 2023*), XAIA Workshop. <u>Paper Link</u>.
- 7) Dammu, Feng, and Shah. "Addressing Weak Decision Boundaries in Image Classification by Leveraging Web Search and Generative Models". *Proceedings of the Thirty-Second International Joint Conference on Artificial Intelligence (IJCAI 2023)*. <u>Paper Link</u>.
- 8) Dammu et al. "Explainable and Personalised Privacy Prediction". In International Conference on Information and Knowledge Management Workshops (CIKM Workshop 2021). <u>Paper Link</u>.
- **9)** Dammu et al. "Interpretable and Robust Face Verification". In International Conference on Information and Knowledge Management Workshops (CIKM Workshop 2021). Paper Link.
- **10) Dammu** & Bapi. "Employing Temporal Properties of Brain Activity for Classifying Autism Using Machine Learning". In 8th International Conference on Pattern Recognition and Machine Intelligence (PReMI 2019). Paper Link.
- 11) Dammu & Bapi. "Temporal Dynamics of the Brain Using Variational Bayes Hidden Markov Models: Application in Autism". In 8th International Conference on Pattern Recognition and Machine Intelligence (PReMI 2019). <u>Paper Link</u>.

PATENTS AWARDED

- Method and System for Feature Based Image Retrieval Inventors: Dammu, P. P. S., Chalamala. S. R., & Singh, A.K. Application Numbers – IP India: 202121021834, US PTO: 17/660,034
- Systems and Methods for Constructing a Modular Siamese Network for Face Verification Inventors: Dammu, P. P. S., Chalamala. S. R., & Singh, A.K. Application Numbers – IP India: 202121007953, US PTO: 17/358,496
- System and Method for Explainable and Personalised Privacy Prediction Inventors: Dammu, P. P. S., Chalamala. S. R., & Singh, A.K. Application Numbers – IP India: 202121049709, US PTO: TBD

AWARDS AND HONORS

- 1) Azure Cloud Computing Credits (Co-PI, Amount: \$20,000)
- 2) UW Top Scholar Award (Amount: 1 Quarter Funding & \$5,000)
- 3) Gold Medal SCIS, University of Hyderabad