Chandrayee Basu

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Experience

Postdoc | Cornell University

2023 - present

Personalized Med-EASi – Retrieval augmented personalized reading assistant for interdisciplinary medical researchers. **Mentoring projects** – Scientific reasoning and hypothesis generation using graph aware LLM.

Researcher | Stanford University

2021 - 2023

Med-EASi – Finely annotated dataset and seq-2-seq models for controllable simplification of medical texts (*AAAI-2023*). **Value-aware LLM** – Finely annotated review dataset and models for value-understanding and value-augmented reasoning over user-item recommendation graph.

Independent Researcher

2019 - 2020

Exploring novel forms of human supervision for controlled medical text simplification.

Al Fellow | Insight

2019

Anomalous Traffic Behavior Generation with GAN - Developed an algorithm that can synthesize anomalous vehicle trajectories from normal traffic data using adversarial training.

Graduate Intern | Computer Science, Stanford University

2018

Learning Multi-modal Human Preference with Active Learning (IROS 2019)

Developed an algorithm to learn complex *multi-modal* human preferences for how robots should act. Augmented the query structure of state-of-the-art comparison-based active reward learning algorithm.

Graduate Intern | InterACT Lab, UC Berkeley

2017

Learning Human Preferences with Rich Active Queries (HRI 2018)

Faster convergence of active query-based reward learning algorithm with feature queries

RA, Robotics Institute | Carnegie Mellon University

2014 - 2015

BLUBot: Bluetooth Localization for Human-Robot Rendezvous

Research Intern | UARC (NASA Data Sciences Group)

2014

PerCCS: Person Count with Machine Learning from CO₂ sensor data (UbiComp 2015)

GSR, Mechanical Engineering | UC Berkeley

2010 - 2013

Smart Lighting

Education

2015 – 2019	Ph.D.	EECS, University of California, Merced (08/16/2019)
		Thesis: Personalizing Autonomous Driving with Rich Human Guidance I developed algorithms to enable AI agents to learn human preferences interactively.
2013 - 2015	M.S.	Advanced Infrastructure Systems, Carnegie Mellon University
2009 - 2013	M.S.	Building Science, Department of Architecture, UC Berkeley
2001 - 2006	B.Arch	Jadavpur University

Skills

Languages: Python (expert), Java (experienced), C++ (familiar), Javascript, MATLAB, HTML, SQLite, SQL, Android Machine Learning tools and libraries: Pytorch, Tensorflow, scikit-learn, Huggingface, LlamaIndex, Recsim, Pandas, NLTK

Machine Learning experience: Natural Language Generation, Preference Learning, Reward Learning, Active Learning, Inverse Reinforcement Learning, Reinforcement Learning, Graph-LLM, Text Style Transfer Engineering: AWS, GCP, Streamlit, PyWren, Toloka, Amazon MTurk, psiTurk, Raspberry Pi, React