Palash Chatterjee

✉ palchatt@iu.edu
🌐 pecey.github.io

EDUCATION

Indiana University	Bloomington, IN
Ph.D. in Computer Science	*May 2026*
Indiana University	Bloomington, IN
M.S. in Data Science	*May 2021*
West Bengal University of Technology	Kolkata, India
B.Tech. in Computer Science and Engineering	*June 2016*

EXPERIENCE

Indiana University — Bloomington, IN
Research Assistant — *Aug 2020 - Present*

- Working with Dr. Roni Khardon on a symbolic planner that can work with longer planning horizons and sparse rewards.
- Migrated the code-base from PyTorch to JAX resulting in 3-5x speedup.

Indiana University — Bloomington, IN
Data Analyst — *Nov 2019 - Aug 2020*

- Collected and analyzed data about K-12 schools to study the relationship between the demographics of students and their performance in computer science courses, and visualized the relationships on a Dash dashboard.

ThoughtWorks Technologies — Gurgaon, India
Application Developer — *July 2016 - July 2019*

- Migrated existing MR pipelines and built custom Spark pipelines for data ingestion, cleanup and transformations to predict after-sales service.
- Built Jenkins pipelines to enable continuous integration and deployment of code in various environments.
- Led a team of 5 to develop a proof-of-concept for predicting equipment based on after-sales invoice with an accuracy of over 70% using decision trees.

PROJECTS

SympyToTorch
Developed an utility to generate a PyTorch computation graph for a SymPy functions.

Episodic Memory DQN
Implemented an episodic memory DQN in PyTorch that augments Q-Learning with episodic memory to improve learning.

Using IMPALA as rollout policy for Monte Carlo Tree Search
Implemented single learner IMPALA architecture and used the same as rollout policy with Monte Carlo Tree Search.

Outlier detection using C2C-Siamese Networks
Detect outliers, by comparing the difference in feature representations of classes, using a Siamese Network, with an accuracy of 70% on MNIST.

TEACHING EXPERIENCE

Indiana University	Bloomington, IN
B659: Topics in AI: Reinforcement Learning	*Spring 2022*

AWARDS

Luddy Outstanding Research Award	*2021*
Luddy School of Informatics, Computing and Engineering, Indiana University	

TECHNICAL SKILLS

Languages: Python, Java, SQL, Latex
Tools and Frameworks: Git, NumPy, Scikit-learn, Pandas, PyTorch, JAX, AWS, MapReduce, Spark, Hive, Jenkins, Redis, Parquet, HTML, CSS