Ananth Shreekumar

Graduate Student, Department of Computer Science
Purdue University

ashreeku@purdue.edu
thiswasnttaken.github.io
+1 (765) 767 1346

Education

Master of Science in Computer Science **Dec 2023**
Purdue University *West Lafayette, IN*
- GPA : **4.0 / 4.0**

Integrated Master of Technology in Computer Science and Engineering **Jul 2021**
International Institute of Information Technology Bangalore *Bangalore, India*
- 5 year Bachelor's + Master's program, GPA : **3.92 / 4.0**

Experience

American Express **Aug 2021 - Dec 2021**
Software Engineer, Enterprise Architecture Team *Bangalore, India*
- Integrating **machine learning capabilities** to the logging, monitoring, and observability framework.
- Implemented a framework that performs automated log analysis on **real-time log data**.

Siemens Healthineers **Jan 2021 - Jul 2021**
Technical Intern, Center for Innovation in Diagnostics Team *Bangalore, India*
- Implemented a pipeline to predict Sepsis onset in ICU patients using **deep learning**.
- The model's performance **exceeded 87%** on Accuracy, F1-Score, Specificity, and Sensitivity metrics.

Purdue University **Aug 2022 - present**
Graduate Teaching Assistant *West Lafayette, IN*
- CS 352 Compilers: Principles and Practice. Spring 2023. *Department of Computer Science.*
- MA 165 Analytic Geometry And Calculus I. Fall 2022. *Department of Mathematics.*

Publications

1. Ananth Shreekumar*, Biswesh Mohapatra*, and Shrisha Rao. Oct 2020. Incorporating Autonomous Bargaining Capabilities into E-Commerce Systems. In *Proceedings of the 20th ACM International Conference on Intelligent Virtual Agents (IVA '20).* Association for Computing Machinery, NY, USA, Article 51, 1–8. doi: 10.1145/3383652.3423865
2. Tarun Dutt, GNS Prasanna, TR Dastidar, and Ananth Shreekumar. Dec 2019. Towards Artifact Rejection in Microscopic Urinalysis. In *Medical Imaging meets NeurIPS 2019 workshop, 33rd Conference on Neural Information Processing Systems.* Vancouver, Canada. [pdf]

Technical Skills

Programming Languages : Python · C++ · C
Tools : Git · Docker · LaTeX
Data Science : Pytorch · Tensorflow · Scikit-Learn · Matplotlib
Others : OpenCV · SQL · Linux

Selected Projects

Reinforcement Learning to play the Snake game
- **Tabular Q learning** and **Deep Q learning**.
- Implemented Double DQN and priority sampling improvements.

University Simple C
- Compiler design and implementation using the **LLVM framework** and C++.
- 6 projects culminating in a **fully functional compiler** for a variant of the C language.

A Bargaining Agent for E-Commerce
- Implemented an **E-Commerce Agent** that has the ability to **bargain** with a user.
- Work featured on a `technology.org` article.

Relevant Coursework

- Machine Learning
- Reinforcement Learning
- Computer Networks
- Data Structures
- Algorithms
- Database Systems
- Compilers
- Operating Systems