Ananth Shreekumar

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West Lafayette, IN, USA

EDUCATION

Master of Science in Computer Science — Jan 2022 - present
Purdue University — West Lafayette, IN, USA

Integrated Master of Technology in Computer Science and Engineering — aug 2016 - jul 2021
International Institute of Information Technology Bangalore — Bangalore, India
- Integrated Bachelor's + Master's program, CGPA : **3.92 / 4.0**

EXPERIENCE

American Express — aug 2021 - dec 2021
Software Engineer — 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 — Bangalore, India
- Implemented a pipeline to predict the onset of Sepsis in ICU patients using LSTMs.
- The model's performance **exceeded 87% on Accuracy, F1-Score, Specificity, and Sensitivity metrics**.

PUBLICATIONS

- 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
- Tarun Dutt, G.N.S. Prasanna, T.R. 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
Data Science : Pytorch • Scikit-Learn • Tensorflow • Keras
Tools : Git • Jenkins • Docker • LaTeX
Others : SQL • XML • Flask • Linux

SELECTED PROJECTS

A Bargaining Agent for E-Commerce — aug 2019 - dec 2019
Prof. Shrisha Rao
- Implementation of an E-Commerce Agent that has the ability to bargain with a user.
- Involves offering discounts, recommending product bundles, and evaluating counter-offers made by the user.
- Work accepted as a full paper at the **20th ACM International Conference on Intelligent Virtual Agents (IVA'20)**.

Open Set Recognition Methods for Microscopic Urinalysis — jan 2019 - jul 2019
Prof. G N Srinivasa Prasanna
- Open Set Recognition methods that accurately classify in-class samples and reject out-of-class samples.
- Created a novel approach that **increased rejection accuracy by 10%** while maintaining **positive class accuracy at 85%**.
- Work accepted at the **Medical Imaging meets NeurIPS 2019 workshop, 33rd Conference on NeurIPS**.

Privacy-Aware Dynamic Access Control Mechanism for Electronic Health Records — sep 2020 - dec 2020
Prof. T K Srikanth
- Consent-based data-sharing of e-health data constrained by purpose and activity.
- Implementation of a prototype that supports privacy preserving operations in a distributed healthcare ecosystem.

A Column Store Database code — apr 2020 - may 2020
Prof. Chandrashekar Ramanathan
- Implemented a schema in XMLSchema for Relational Database schemas.
- Implemented classes that parse the schema instance and create required tables, views, and add constraints.

RELEVANT COURSEWORK

- Machine Learning
- Reinforcement Learning
- Mathematics for Machine Learning
- Visual Recognition
- Data Structures and Algorithms
- Data Modeling