

EDUCATION

Integrated Master of Technology in Computer Science and Engineering

AUG 2016 - PRESENT

INTERNATIONAL INSTITUTE OF INFORMATION TECHNOLOGY BANGALORE

- Bachelor's + Master's degrees, Current CGPA : 3.91 / 4.0
- Integrated 5 year program, Expected Graduation : JULY, 2021

RESEARCH EXPERIENCE

Privacy-Aware Dynamic Access Control Mechanism for Electronic Health Records

SEP 2020 - PRESENT

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 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.
- Implemented the Openmax technique to the problem.
- Created a novel approach that increased rejection accuracy by 10% while maintaining positive class accuracy at 85%.
- Work included in a paper at the Medical Imaging meets NeurIPS 2019 workshop, 33rd Conference on NeurIPS.

PUBLICATIONS

- Ananth Shreekumar, Biswesh Mohapatra, and Shrisha Rao. 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:<https://doi.org/10.1145/3383652.3423865>
- Tarun Dutt, G.N.S. Prasanna, T.R. Dastidar, and Ananth Shreekumar. 2019. Towards Artifact Rejection in Microscopic Urinalysis. In *Medical Imaging meets NeurIPS 2019 workshop, 33rd Conference on Neural Information Processing Systems*. Vancouver, Canada. [\[PDF\]](#)

IN THE NEWS

- Article “Automated negotiation agent for e-commerce” in www.technology.org

POSITIONS OF RESPONSIBILITY

Student Mentor

NOV 2020 - PRESENT

INTERNATIONAL INSTITUTE OF INFORMATION TECHNOLOGY BANGALORE

- Mentor to a group of freshmen as part of the institute's student mentorship program.

Student Ambassador

SEP 2020 - NOV 2020

INTERNATIONAL INSTITUTE OF INFORMATION TECHNOLOGY BANGALORE

- Promoted my institute on official channels as well as on social media.
- Provided support, encouragement and advice to prospective students.

Teaching Assistant

AUG 2019 - DEC 2019

MATHEMATICS FOR MACHINE LEARNING

PROF. AMIT CHATTOPADHYAY

- Responsibilities included handling tutorial classes, problem solving sessions, and evaluating answer scripts.

PRESENTATIONS & WORKSHOPS

20th ACM International Conference on Intelligent Virtual Agents

OCT 2020

ACM

- Oral and poster presentations of our paper *Incorporating Autonomous Bargaining Capabilities into E-Commerce Systems*.

Global Leader Experience, Bangalore

DEC 2019

COMMON PURPOSE

- Week-long program designed to build leadership and team working skills and to develop Cultural Intelligence.
- Worked with students of **King's Business School, London** to propose a novel solution for the waste disposal problem.

SELECTED PROJECTS

The Mapper Algorithm • [Code](#)

MAR 2020 - APR 2020

CS/DS 815 - TOPOLOGICAL DATA ANALYSIS

PROF. AMIT CHATTOPADHYAY

- Implemented the Mapper algorithm from Computational Topology.

A Column Store Database • [Code](#)

APR 2020 - MAY 2020

DS 603 - DATA MODELING

PROF. CHANDRASHEKAR RAMANATHAN

- Implemented a schema in XMLSchema for Relational Database schemas at a meta-meta-data level.
- Implemented classes that parse an XML instance and create required tables, views and add appropriate constraints.

Algorithms in Reinforcement Learning • [Code](#)

JUN 2020

PERSONAL PROJECT

- Implemented DQN, Double DQN, and Rainbow improvements out of interest in the domain.
- Used the OpenAI-Gym environments to validate my algorithms and implemented an environment for the Snake game.

TECHNICAL SKILLS

Programming Languages : Python • C++ • C

Tools : Git • Jenkins • Docker • GNUPlot • \LaTeX

Data Science : Pytorch • Scikit-Learn • Tensorflow • Keras

Others : SQL • XML • Flask • Linux

HONORS AND AWARDS

Member of the [Dean's Merit List](#) at IIIT-Bangalore for outstanding academic performance.

2016 - PRESENT

Huawei Merit Scholarship

2019

Institute Merit Scholarship

2017, 18

TEST SCORES

GRE : Verbal : 160 / 170, Quantitative : 168 / 170, Analytical Writing : 5.0 / 6.0

TOEFL : Overall : 115 / 120 - Reading : 30 / 30, Listening : 29 / 30, Speaking : 28 / 30, Writing : 28 / 30