

# ANANTH SHREEKUMAR

✉ ananth.shreekumar@iiitb.org • 🌐 Portfolio • 🐙 Github • 📞 (+91) 88848 55983

## EDUCATION

### Integrated Master of Technology in Computer Science

AUG 2016 —

- 9th Semester Student, CGPA : 3.91 / 4.0
- 5 year program, Expected Graduation : July, 2021

[\[TRANSCRIPT\]](#)

## EXPERIENCE

### Research Intern - Open Set Recognition Methods for Microscopic Urinalysis

JAN 2019 - JUL 2019

- Open Set Recognition methods that accurately classify in-class (positive) 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 included in a paper that was accepted at the **Medical Imaging meets NeurIPS 2019 workshop, 33rd Conference on NeurIPS**.

### Teaching Assistant - Mathematics for Machine Learning course

AUG 2019 - DEC 2019

- Responsibilities included handling tutorial classes, problem solving sessions and exam paper evaluation.

## PUBLICATIONS

- Ananth Shreekumar\*, Biswesh Mohapatra\*, and Srisha Rao. *Incorporating Autonomous Bargaining Capabilities into E-Commerce Systems*. 20th ACM International Conference on Intelligent Virtual Agents. [Accepted]
- Tarun Dutt, G.N.S. Prasanna, T.R. Dastidar, and Ananth Shreekumar. *Towards Artifact Rejection in Microscopic Urinalysis*. Medical Imaging meets NeurIPS 2019 workshop, 33rd Conference on Neural Information Processing Systems. [\[PDF\]](#)

## ACHIEVEMENTS

Selected for **Dean's Merit List** at IIIT-B for outstanding academic performance.

2017 —

All India **IIT-JEE Main** Examination - 99.39 percentile.

2016

Karnataka State **Common Entrance Test** - Rank 98 / approx. 120,000 candidates.

2016

## PROJECTS

### E-Commerce Bargaining Agent

AUG 2019 - JUL 2020

- Implementation of an E-Commerce Agent that has the ability to bargain with a user by 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)**.

### The Mapper Algorithm

MAR 2020 - APR 2020

- Implemented the Mapper algorithm from Computational Topology.
- Involves dimensionality-reduction that requires implementing a variable number of loops, solved by looping within recursion.

[🔗CODE](#)

### A Column Store Database

APR 2020 - MAY 2020

- Implemented a schema in XMLSchema for Relational Database schemas. This required working at a meta-meta-data level.
- Implemented Schema Extractor and Schema Loader classes, that parse an XML instance of the above XMLSchema and create required Tables, Views and add the appropriate Entity-Integrity Constraints and Referential Integrity Constraints.

[🔗CODE](#)

### Bangalore Metropolitan Transport Corporation - Cost Minimization

JAN 2018 - MAR 2018

- Optimization of the Bangalore Metropolitan Transport Corporation bus schedule to minimize their cost of operation.
- Constraints included a time table and the number of buses along a route.

## EXTRA-CURRICULARS

### Global Leader Experience, Bangalore

DEC, 2019

- This week-long program was designed to build leadership and team working skills and to develop Cultural Intelligence.
- Worked with students from **King's Business School, London** to provide a solution for the waste disposal problem in Bangalore.

## TECHNICAL SKILLS

**Programming Languages** : Python • C++ • C

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

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

**Others** : SQL • XML • Linux • MS Excel