

Prashanthi Ramachandran

prashanthi-r.github.io



EDUCATION

Postgraduate Diploma in Advanced Studies and Research

Ashoka University | Computer Science

Aug. 2020 – May 2021

Bachelor of Science (Honours)

Ashoka University | Computer Science | Cum Laude Honours | Dean's list (3 semesters)

Aug. 2017 – May 2020

RESEARCH

S++: A Secure Computation Framework

December 2019 – November 2020

Ashoka University

Sonapat, India

- Developed a secure three-party framework for privacy preserving ML training for exponentiation-based activation functions under the guidance of [Prof. Debayan Gupta](#).
- Accepted for poster presentation at The Second AAI Workshop on Privacy-Preserving Artificial Intelligence (PPAI 2021) workshop.

Blocksim-Net: A Network-Based Blockchain Simulator

May 2020 – Present

Koç University

Istanbul, Turkey

- Developed a network-based blockchain simulator for Bitcoin and Ethereum networks that can be used for beta-testing, optimisations, and attacks mitigation at Koç University's Summer Research Programme.
- Accepted to and [presented](#) at [BAŞARIM 2020](#). Extended work in progress with the Cryptography, Security, and Privacy Research Group at Koç University, under [Prof. Alptekin Küpçü](#) for submission to The Turkish Journal of Electrical Engineering & Computer Sciences.

EXPERIENCE

Capstone Project | Ashoka University.

Sep. 2020 – December 2020

- Implemented state-of-the-art privacy preserving linear regression frameworks such as SecureML and ABY3 under the guidance of [Prof. Mahavir Jhavar](#). [Link to presentation](#).

Intern | [AshokaX](#), Ashoka University.

June 2020 – Aug 2020

- Launched the pilot version of AshokaX, Ashoka University's EduTech initiative and onboarded 11 classes of online learners as a part of the programme team. Worked on the learning management system and aided the instructors and online learners with technical troubles.

Hyperfunds - A Hyperledger application | Ashoka University

Feb 2020 – May 2020

- Built a distributed application on Hyperledger Fabric that enables faculty at Ashoka University reliably spend their research funds with approval from the right administrators using Python and Javascript.

Neural Machine Translation | Ashoka University

Feb 2020 – May 2020

- Built an LSTM Encoder-Decoder based model for machine translation from English to Hindi with Attention mechanism in Python.

Software Development Intern | [Trivedi Center for Political Data](#)

Dec 2019 – Jan 2020

- Added query by ID functionality and fixed bugs for the software Surf, used for incumbency mapping for Indian politicians in Java.

Summer Intern | Technology Business Incubator, SASTRA University

July 2019 – Aug 2020

- Worked on interior designing using VR in Unity and C#.

Yao's Garbled Circuits

May 2018 – August 2018

- Implemented RSA based oblivious transfer and Yao's garbled circuits in C.

POSITIONS HELD

Teaching Assistant | Computer Organisation and Systems, [Prof. Manu Awasthi](#), Ashoka University

2020

President | Women in Computing Society, Ashoka University

2020 – Present

Team Representative and Vocalist | Alankar, Vistaar – The Music Society of Ashoka

2018 – 2019

Tutor | Probability and Statistics | Computer Science Helpdesk, Ashoka University

2019

Academic Counselor | Young Scholars Programme, Ashoka University

2019

Student Ambassador | Ashoka University

2018