

Prashanthi Ramachandran



EDUCATION

Postgraduate Diploma in Advanced Studies and Research

Ashoka University | Computer Science

Aug. 2020 – May 2021 (Expected)

Bachelor of Science (Honours)

Ashoka University | Computer Science | Cum Laude Honors

Aug. 2017 – May 2020

RESEARCH EXPERIENCE

S++: A Secure Computation Framework

Ashoka University

Jan 2020 – November 2020

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](#).
- Submitted to The Second AAI Workshop on Privacy-Preserving Artificial Intelligence ([PPAI 2021](#)) workshop.

Capstone Project

Ashoka University

Sep. 2020 – December 2020

Sonapat, India

- Implementing privacy preserving linear regression frameworks, such as SecureML and ABY3 under the guidance of [Prof. Mahavir Jhawar](#). Link to the final [presentation](#).

Blocksim-Net: A Network-Based Blockchain Simulator

Koç University

May 2020 – Present

Istanbul, Turkey

- Developed a network-based blockchain simulator for Bitcoin and Ethereum networks that can be used for beta-testing, optimisations, and attacks mitigation. [Presented](#) at BAŞARIM 2020 and submitted to two journals.
- Extended work in progress with the Cryptography, Security, and Privacy Research Group at Koç University, under [Prof. Alptekin Küpçü](#).

INTERNSHIPS AND PROJECTS

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

June 2020 – Aug 2020

- Launched the pilot version of AshokaX, designed the learning management system, and onboarded 11 classes of online learners as part of the programme team.

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, Ashoka University

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

- Got hands-on experience with 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 – Present

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

2019

Academic Counselor | Young Scholars Programme, Ashoka University

2019

Student Ambassador | Ashoka University

2018