

Education

University of California Santa Barbara, CA

Sept 2023 – June 2025 (Expected)

*Master of Science in Computer Science***Coursework:** Advanced Operating Systems, Future User Interfaces**Teaching Assistant:** Theory of Computation and Automata

National Institute of Technology Karnataka (NITK), Surathkal, India

July 2015 – May 2019

Bachelors of Technology in Information Technology

GPA: 9.1/10

Coursework: Information Assurance and Security, Operating Systems, Data structures and algorithms

Technical Skills

Languages: Python, C#, C++, Typescript**Tools & Technologies:** React, Git, Visual Studio, Azure Data Explorer, PowerBI, T-SQL, Powerapps Component Framework, Microsoft Dynamics 365, .NET framework, Azure DevOps, Linux, Kernel Programming

Experience

Microsoft

July 2019 – July 2023

*Software Engineer 2**Bangalore, India*

- Contributed to Dynamics 365 Customer Service SaaS offering with **1.75M+** monthly users and **\$1B+** revenue.
- Developed a single-tab experience for simplified data entry during case creation using React. This eliminated the need for screen navigation and brought down the number of clicks from **14 to 3** per case operation.
- Developed several data aggregation, visualisation tools and dashboards using Azure Data Explorer and PowerBI for viewing adoption and usage related metrics.
- Spearheaded **100% support call reduction** for scheduling feature, optimizing customer experience.

Indian Institute of Technology, Madras

Aug 2018 – Dec 2018

*Research Intern, Supervisor: Prof. Shweta Agrawal**Chennai, India*

- Implemented a secure auction protocol using verifiable proxy oblivious transfer and garbled circuits, synthesizing insights from two seminal papers. Crafted efficient bit-slice auction logic, ensuring robustness and performance.

Fidelity Investments

May 2018 – July 2018

*Software Engineering Intern, Brokerage Technology Group**Bangalore, India*

- Architected a trade notifier PoC leveraging Apache Kafka, replacing a mainframe system.
- Influenced stakeholders to embrace Apache Kafka for trade notifications, achieving remarkable persistence, fault tolerance, and **sub-13ms** latency while processing 11,000 trade records.

Indian Institute of Science

May 2017 – July 2017

*Summer Research Intern, Supervisor: Prof. Y Narahari**Bangalore, India*

- Used Gambit to implement an algorithm to find the optimal allocation of experts to cyber-security alerts by modeling the scenario as a Stackelberg security game.

Projects

Data security through file system encryption | C, Kernel Programming, Linux

- Built a new Linux file system where its metadata such as superblocks, block group descriptors, block group information, and directories are encrypted.

ImgCrypt | Python, Cryptography, Encryption Schemes

- Implemented a symmetric image encryption scheme using dynamic S-BOX and T-BOX

Blockchain-free Cryptocurrency | Python, Blockchain, Cryptography, Information Security

- Built a blockchain-free cryptocurrency based off a research paper such that it avoids mining pools and centralization found in traditional blockchain-based cryptocurrency networks.

Bees swarm optimization guided by data mining techniques for document information retrieval

- Engineered a novel method for document information retrieval using the efficient pattern-count tree structure along with bee swarm optimization.

Activities

Computer Society, IEEE-NITK Student branch: Co-head of theoretical computer science interest group**Capture the Flag (CTF) :** Member of CTF team with peak ranking of **19** in India**Carnatic classical music:** Trained senior level vocalist