

EDUCATION

North Carolina State University
Ph.D. Computer Science - GPA: 3.9/4.0

Raleigh, NC
Aug. 2019 – Present

PES University
B.E. Computer Science - GPA: 7.9/10.0

Bangalore, India
Aug. 2015 – May 2019

EMPLOYMENT

North Carolina State University
Graduate Teaching Assistant

Raleigh, NC
Aug 2022 – Present

- TA (with 3 others) for 119 students for a graduate Automated Software Engineering class.
- TA (with 4 others) for 243 students for a graduate Software Engineering class.

Graduate Research Assistant

Jan. 2020 – May 2022

- **Better, faster deep learning for SE:** Improved defect prediction by up to 123% (F-1 score), code smell detection by up to 30% (AUC)
- **Semi-supervised learning:** Achieved state-of-the-art results on static code warnings analysis using 10% (median) labels.

Graduate Teaching Assistant

Aug. 2019 – Jan. 2020

- Held office hours for 54 undergraduate students and delivered lectures on C++.

Amazon

Bellevue, WA

Software Dev Engineer Intern

May 2022 – Jul 2022

- Developed a full-stack system to publish announcements in scorecards used by delivery service partners (DSPs).
- **Technology:** React/Redux, TypeScript, Redux Saga, DynamoDB, Java Spring

Indian Institute of Astrophysics

Bangalore, India

Research Intern

Jul. 2018 - Mar. 2019

- **Image denoising:** Worked on image restoration of globular clusters using convolutional neural networks.
- **Research:** Proposed novel adaptive learning rate scheme for deep neural networks and demonstrated faster convergence by up to 100,000x.

HONORS

2022, [Google Cloud Champion Innovator](#)

RELEVANT PROJECTS

pysh

May 2021 - Present

C++, TMLanguage

[GitHub](#)

Developed a superset of Python that allows running Shell code natively, with a VS Code syntax highlighting extension.

Threaded Discussions Website

Feb. 2021 – June 2021

MongoDB, Node.js, React

[GitHub](#)

Companion website for video calls that allows for Reddit-style, threaded discussions.

NearConnect

Nov. 2020 – Mar. 2021

iOS, Swift

[GitHub](#) :: [App Store](#)

iOS app to connect with people nearby using multicast peer-to-peer connections.

JournalBear

Jun. 2017 – Feb. 2019

JavaScript, Electron

[GitHub](#) :: [Softpedia](#)

Cross-platform journal application with AES-256 encryption. Rated 4/5 by Softpedia.

Results Scraper

Mar. 2018 – Aug. 2018

MongoDB, Express, React, Node.js

[GitHub](#)

Website for scraping university examination results and displaying charts and printable reports, with caching using a database.

Video Sharing Website

Oct. 2017 – Dec. 2017

MySQL, Express, React, Node.js, Sass, Elasticsearch

[GitHub](#)

Simplified implementation of a video-sharing website with subscriptions and custom searching.

Xtreme Calculations

Apr. 2013 – Oct. 2017

VB.NET, Python

[Softpedia](#)

Windows math software to solve scientific and mathematical problems, with over 30,000 downloads over multiple sites.

Video Indexer

Jun. 2017 – Sep. 2017

C++, Qt, CMUSphinx

[GitHub](#)

Cross-platform desktop application to detect the time(s) a given keyword was spoken in a given video.

Web development projects

Jan. 2017 – Nov. 2017

MongoDB, Express, React, Node.js, D3, Sass

[GitHub](#)

Projects include URL shortener, rogue-like dungeon crawler game, voting application, Simon game, land surface temperature heatmap, and mapping meteorite impacts across the globe.

SKILLS

Languages: Python, TypeScript, Java, C++

Frameworks: Flask, Keras, PyTorch, Node.js, React

Databases: SQL, MongoDB, DynamoDB