

EDUCATION

North Carolina State University

Ph.D. Computer Science – Advisor: Dr. Tim Menzies

Raleigh, NC

Aug 2019 - Exp. Dec 2023

PES University

B.E. Computer Science

Bangalore, India

Aug 2015 - May 2019

EMPLOYMENT

Amazon

Software Dev Engineer Intern

New York, NY

May 2023 - Aug 2023

- Implemented profile locks for Prime Video on Echo Show devices.
- **Technology:** React Native, TypeScript

Software Dev Engineer Intern

May 2022 - Jul 2022

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

North Carolina State University

Graduate Teaching Assistant

Raleigh, NC

Aug 2022 - Apr 2023

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

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% of the labels.

HONORS AND AWARDS

Google Cloud Champion Innovator, 2022

RELEVANT PROJECTS

Programmable Resumes

Python

Aug 2023 - Present

[GitHub](#)

Developed a specification and implementation for modular, customizable resumes with support for two popular LaTeX templates.

pysh

C++, TMLanguage

May 2021 - Present

[GitHub](#)

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

Threaded Discussions Website

MongoDB, Node.js, React

Feb 2021 - Jun 2021

[GitHub](#)

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

NearConnect

iOS, SwiftUI

Nov 2020 - Mar 2021

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

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

JournalBear

JavaScript, Electron

Jan 2017 - Feb 2019

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

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

Results Scraper <i>MongoDB, Express.js, React, Node.js</i> Website for scraping university examination results and displaying charts and printable reports, with caching.	Mar 2018 - Aug 2018 GitHub
Video Sharing Website <i>MySQL, Express.js, React, Node.js, Sass, Elasticsearch</i> Simplified implementation of a video-sharing website with subscriptions and custom searching.	Oct 2017 - Dec 2017 GitHub
Xtreme Calculations <i>VB.NET, Python</i> Windows math software to solve scientific and mathematical problems, with over 30k downloads across multiple sites.	Apr 2013 - Oct 2017 Softpedia
Video Indexer <i>C++, Qt, Sphinx</i> Cross-platform desktop application to detect the time(s) a given keyword was spoken in a video.	Jun 2017 - Sep 2017 GitHub
Web development projects <i>MongoDB, Express.js, React, Node.js, Sass, D3.js</i> Projects include URL shortener, rogue-like dungeon crawler game, voting application, Simon game, land surface temperature heatmap, and mapping meteorite impacts across the globe.	Jan 2017 - Nov 2017 CodePen

SKILLS

Languages: Python, TypeScript, Java, C++

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

Databases: MySQL, MongoDB, DynamoDB

Technologies: Large Language Models (LLMs), Deep Learning, Machine Learning, Full-Stack Development