

EDUCATION

University of Tennessee, Knoxville

B.S. in Computer Science

Knoxville, TN

Aug 2020 – May 2025

- **GPA:** 3.5
- **Minor:** Mathematics

EXPERIENCE

Hack4Impact UTK

Director of Engineering

Knoxville, TN

May 2024 – Present

- Overseeing 4+ student-led MERN stack projects and over 40 developers at Hack4Impact UTK, ensuring professional development standards, technical excellence, and on-time project delivery.
- Served as the go-to director for technical questions and high-level system architecture planning.
- Tracked each team's engagement to ensure every developer contributes to their project.

IBM

Software Engineer Intern

Austin, TX - Raleigh, NC - Remote

May 2023 – Present

- Developed a REST API using FastAPI that serves employee device performance and health score data, improving accuracy of reactive IT support for over 300,000 devices.
- Integrated device performance data into employee device provisioning logic, allowing 110,000+ employees to receive a device catered towards their specific computation needs.
- Increased the data transfer speed of a crucial data pipeline by 12mb/s (300%) by developing a multi-threaded REST API batch processing solution in Python, successfully replacing a sunsetted technology.
- Re-architected a Vue.js client application and implemented a modern SSO system, leading to a 68% reduction in on-page-load API calls and a 99% reduction in login-related support tickets, impacting over 300,000 users.

ACTprep.com

Software Engineer

Remote

May 2022 – Present

- ACTprep.com is a Knoxville-based ACT tutoring company with a focus on developing students' study skills and preparing them for college.
- Founded and currently leading the technical team, including continuous design, development, and maintenance of features to support over 130 daily active users and over 2,000 users all-time.
- Automated and digitized all company operations through a series of Javascript/React apps and a centralized Python (Django) backend, reducing annual costs by \$50,000, doubling student capacity per coach, and preparing for nationwide expansion.
- Built a mock ACT digital testing app, with more than 18,000 tests administered.
- Built a student dashboard that has now logged 50,000+ hours of student use with fully automated guidance through the program.
- Enabled the creation of over 100 4+ star rated test questions through a feature that allows students to generate new test questions through OpenAI's gpt-4o REST API.

Hack4Impact UTK

Technical Lead

Knoxville, TN

May 2023 – May 2024

- Directed a team of five student software developers in the creation of a map-based data visualization software designed to provide insights to United Way of Greater Knoxville (UWGK) on where to direct funding/grants based on community support demographics.
- Held weekly programming workshops focused on a Next.js stack based on the MERN stack (MongoDB, Express, React, Node), successfully teaching the team to develop production-grade web applications
- Led periodic meetings with UWGK stakeholders to ensure that the project is following their guidelines and expectations.

SKILLS

Languages: Python, JavaScript/TypeScript, Java, C++, SQL, HTML, CSS

Software: Git, Django, React, Docker, PostgreSQL, MongoDB, Spring Boot, Nginx, Pandas, Numpy, FastAPI, Flask, NextJS

Platforms: AWS (S3, EC2), Digital Ocean, IBM Cloud (Object Storage, CloudPak for Data, Watsonx)

Technical Expertise: REST APIs, Microservices, OAuth2/SSO systems, WebSockets, Data pipelining/ETL