# Sai Akhilesh Tulluri

 $\underline{akhilesh@tulluri.me} \mid linkedin.com/in/akhiltulluri \mid github.com/akhiltulluri \mid \underline{tulluri.me}$ 

#### Education

#### Northeastern University

Master of Science in Computer Science <u>Coursework:</u> Programming Design Paradigms, Computer Systems

### Vellore Institute of Technology

Bachelor of Technology in Computer Science and Engineering (CGPA: 9.03/10.0) <u>Coursework:</u> Data Structures & Algorithms, Web Development, Database Systems

#### EXPERIENCE

#### Graduate Teaching Assistant

Khoury College of Computer Sciences, Northeastern University

• Teaching Assistant for CS4500 Software Development course under the guidance of Dr. Matthias Felleisen and Dr. Benjamin Lerner.

## Software Engineering Intern

Jarobe Labs | Next.js, TypeScript, PostgreSQL, Vercel

- Engineered a GitHub App and web platform for a cutting-edge developer tool designed to enhance organizational security using GitHub.
- Integrated the Web Authentication API to implement a critical security feature, enabling two-factor authentication (2FA) for GitHub Pull Request approvers.

## Software Engineering Intern

DigitalFortress | Python, Django REST Framework, MySQL, AWS

- Enhanced the Point of Sale (POS) system's sales dashboard API latency by 50% through SQL query optimization, refining inefficient queries and reducing unnecessary database lookups.
- Orchestrated a robust CI/CD pipeline to automate unit tests, build Docker images, and deploy to GitHub Container Registry; streamlined updates with Watchtower on AWS EC2 and optimized backend API delivery using Nginx.

## Software Engineering Intern, Platform Team

eFuse | Node.js, Next.js, Redux, TypeScript, Python, MongoDB, AWS

- Mitigated potential data exfiltration and IDOR attacks by identifying and remediating at least three critical security vulnerabilities in backend API endpoints.
- Enhanced user experience in low-bandwidth areas by improving gaming video content delivery through the integration of Cloudflare Stream and HLS video format.
- Led the initiative to connect over 150,000 gamers across 100+ communities with esports internships, scholarships, and more, leveraging eFuse's API through the development of a Discord bot.
- Improved code quality and reduced production errors through the standardized migration to TypeScript, implementation of Cypress integration testing, and establishment of a CI pipeline for eFuse's frontend.

## Projects

- **VTAPP Event Platform** | *Next.js, MySQL, Airtable, Cloudflare pages* <u>GitHub</u> | <u>Demo</u> (Feb 2024)
  - Developed a user-friendly web platform for a technical fest using Next.js, MySQL and Drizzle ORM (5k+ users).
  - Integrated QR-code based ticketing system & Airtable spreadsheets, enabling easier event management (generated 50k+ tickets for 80+ events) and deployed to serverless environment on Cloudflare.

## Restaurant Monitoring - API | FastAPI, PostgreSQL, SQLAlchemy, SQLModel, Redis GitHub (Jun 2023)

- Built a robust monitoring API to generate restaurant uptime/downtime reports for 10k+ stores.
- Implemented an efficient algorithm for calculating store's uptime/downtime. Utilized Redis and Python-Arq to asynchronously handle report generation. Achieved a benchmark of 155 seconds for processing 14,000 stores.

#### TECHNICAL SKILLS

Languages: Python, TypeScript, JavaScript, Java, C, HTML/CSS Frameworks: Flask, FastAPI, Django, Express.js, React.js, Next.js, Redux, Webpack, Spring, Angular Databases: PostgreSQL, MySQL, SQLite, MongoDB, Redis, Oracle Other Tools: Amazon Web Services, Microsoft Azure, Cloudflare, Docker, Git & GitHub, Linux/Unix

Boston, MA, United States Sep 2024 – May 2026

> Andhra Pradesh, India Aug 2020 – May 2024

> > Sep 2024 - Present

Jan 2024 – Apr 2024

Boston, MA, United States

Jackson Center, OH, United States (Remote)

May 2023 – Aug 2023

Andhra Pradesh, India

Nov 2020 - Apr 202

Nov 2020 – Apr 2022 Columbus, OH, United States (Remote)