# **Tanmay Saxena**

## Summary

Software engineer with 3+ years of experience building scalable web applications and robust backend systems. Proficient in JavaScript, Node.js, React, and Express.js with expertise in PostgreSQL, MongoDB, and cloud services (AWS & GCP). Strong foundation in RESTful APIs, JWT, object-oriented design, and cross-browser compatible UIs.

### **Technical Skills**

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

Frameworks & Libraries: React, Node.js, Express.js, Django, Flask, Angular, Vue.js, Svelte, Next.js

Tools & Platforms: AWS (EC2, RDS, S3, Lambda), Google Cloud, Docker, GitHub Actions, RESTful APIs, GraphQL

Databases: PostgreSQL, MongoDB, MySQL, Elasticsearch, DynamoDB, Redis

Development Practices: OOP, SOLID, Microservices, System Design, Unit Testing, CI/CD, Debugging

### Experience

## Association for Computing Machinery (ACM) - University of Florida

Mar 2025 - Current

Software Engineer

Gainesville, FL

- Optimized front-end load performance by 50% for a real-time dashboard app using Vite and Material UI tuning.
- Reduced AWS costs by 30% by transitioning workloads to Lambda and optimizing EC2 usage.
- Deployed full-stack apps with Node.js, PostgreSQL, and React using AWS and Docker.

**Applyin.co** Jun 2024 – Aug 2024

SDE Intern Remote

- Built and optimized RESTful APIs in Node.js and Express.js; improved latency by 35%.
  - Improved first input delay by 40% using React SSR, memoization, and event optimization.
  - Used JWT for secure auth flows and integrated Google SSO, reducing onboarding time by 60%.
- Boosted user engagement by 25% with a dynamic, interactive React-based story-builder tool.

#### **Tata Consultancy Services (TCS)**

Jan 2021 - May 2023

Systems Engineer (Developer for General Motors)

Bengaluru, India

- Automated data processing with Django-React app, reducing manual work by 87.5%.
- Improved PostgreSQL query performance by 60% across a 1TB+ dataset via indexing and partitioning.
- Cut deployment time by 50% by implementing CI/CD pipelines using GitHub Actions.
- Built real-time React dashboards, reducing issue resolution time by 40%.
- Scaled backend pipeline capacity by 2x to support 21+ ADAS features in autonomous vehicle data.
- Collaborated in Agile teams; led debugging sessions to resolve complex JS issues across the stack.

### **Projects**

## UniBazaar | Golang, PostgreSQL, React, Tailwind CSS, Docker, AWS (EC2, RDS, S3, Lambda)

- Reduced API response latency by 35% by optimizing Golang RESTful APIs and WebSocket communication.
- Ensured 99.9% uptime for real-time chat by deploying a WebSocket backend on AWS EC2 with auto-scaling.

# Essay Evaluator | Python, Django, OpenAl API, PostgreSQL, React

- Automated essay grading, reducing manual effort by 40% using OpenAI-powered text analysis and Django.
- Increased user onboarding speed by 60% by implementing Google SSO authentication and streamlining session

#### Text-Redactor | Pvthon

- Developed a Python package to redact sensitive information, improving privacy compliance by 80%.
- Processed large-scale text data 60% faster by optimizing regex-based pattern matching.

#### Education

University of Florida

Aug 2023 - May 2025

Master of Science in Computer Science (GPA: 3.89 / 4.00)

Gainesville, FL

SRM Institute of Science and Technology

Jun 2016 - May 2020

BTech in Electronics and Communications Engineering (GPA: 8.58 / 10.00)

Chennai, India