Tatsat Jha

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SUMMARY

Energetic software developer with prior experience and a strong foundation in Java, Python, C++, TypeScript, SQL, and modern frameworks. Skilled in development, testing, and deployment with hands-on experience in APIs and cloud technologies. Eager to contribute to Wells Fargo's mission by applying technical expertise and adaptability in a fast-paced, team-oriented environment.

EDUCATION

B.S. Computer Science   May, 2027
Arizona State University (Barrett The Honors College)   **4.27 GPA**

Coursework: Data Structures/Algorithms, Compilers, Machine Learning, Linear Algebra, Theoretical CS, Software Engineering

TECHNICAL SKILLS

Programming Languages: Java, Python, C/C++, Typescript, Swift, x86, Shell, Scheme, OCaml
Front-End: HTML, CSS, React, React Native, Vue, Vite, React Router, Tailwind, Zustand(state-management), Hugo
Tools, Databases, and OS: PyTorch, Neovim, Node.JS, Postgres, Mongodb, firebase, django, docker, jupyter notebook, git, github, linux

PROFESSIONAL EXPERIENCE

Software Development & Project Management Aide: Digital Innovation Group, Arizona State University   *09/2024 – Present*
- Developed and released an open-source static site tool to integrate with Zotero, automating bibliographic citation fetching and rendering
- Developed and maintained 3+ websites using the Hugo web framework with features to enhance user accessibility and experience
- Building a workplace-scheduling web app using Django and Vue.js, leading architectural planning to ensure scalability and maintainability

Student Worker: US-Research-Software-Engineering Association *(National professional organization)*   *05/2025 - Present*
- Maintain us-rse.org using Jekyll and Docker, ensuring up-to-date information for national community of 3000+ research software engineers
- Draft materials to include "Research Software Engineering" in the U.S. Bureau of Labor Statistics Standard Occupational Classification

Technical Writer (Software and API Documentation): Freelance   *11/2021 - 01/2023*
- Authored 10+ educational articles on topics including REST API, Node.js, and computer networking, to help developers deepen their skills
- Wrote comprehensive Python API documentation for an enterprise data platform, reducing onboarding time and improving accessibility

PROJECTS & LEADERSHIP

Vantage-Fit *(Personal Training App)*   *05/2024 – Present*
- Developed a fitness app for building and sharing training programs, integrating AI-driven recommendations to personalize workout plans.
- Engineered a custom Retrieval-Augmented Generation (RAG) pipeline to enhance ChatGPT-4o's performance for exercise-related queries
- Implemented an intuitive frontend with features such as drag-and-drop workout builders, progression tracking, and real-time plan-sharing

Jarvis-Project *(AI-agent)*   *07/2025-Present*
- Built a fully offline smart-speaker in C++ and Python, capable of voice commands, information retrieval, and basic home assistant tasks
- Integrated Chatterbox-TTS, OpenAI Whisper, and keystroke tracking to enable speech-to-speech interaction without cloud dependency

Algo-Visual *(Algorithm-visualizer)*   *05/2025-Present*
- Built a client-side React app to visualize shortest-path algorithms, including Dijkstra's Algorithm, for interactive learning
- Implemented a fast, responsive Canvas-based UI for building and editing trees and graphs, enabling smooth real-time visualizations

Lexical-Analyzer *(Class Project)*   *01/2025-04/2025*
- Implemented a lexer and parser to compile a custom programming language into an intermediate representation in a C-like language
- Applied Thompson's construction and subset construction, wrote tokenizers, and parsed context-free grammars into LL(1) form.

Stack-Overflow Clone *(Group Project)*   *01/2025-04/2025*
- Co-led development of Java-based Q&A platform with SQL integration, supporting CRUD operations, direct messaging, and authentication
- Organized 25+ standups over 4 months and trained team members in Git workflows, ensuring on-time delivery of project milestones

AWARDS & SCHOLARSHIPS

National Merit Scholarship — *2023 - 2027,* Awarded for outstanding academic achievement and success each semester. Top 1% of students.
ASU Dean's List — *2023 - Present,* Consistently achieved academic excellence in each semester with a GPA of above 3.5
FIRST Robotics Dean's List Semi-Finalist — *2021,* Nominated to this award for outstanding leadership and dedication in FIRST Robotics