Tanvi Ranade

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EDUCATION

Johns Hopkins University

Baltimore, MD

Bachelor of Science in Computer Science and Biomedical Engineering | GPA: 3.96/4.00

August 2022 - May 2026

- Courses: Data Structures (TA), Intro Algorithms (TA), Artificial Intelligence, Full-Stack JavaScript, Computer Systems Fundamentals, C/C++ Intermediate Programming (TA), Discrete Math, Linear Algebra, Prob/Stats
- Activities: Women in Computer Science (President), ACM, Kesem (Operations Coordinator), Blue Jay Bhangra

EXPERIENCE

Software Development Engineer Intern

May 2025 - Present

Redmond, WA

Amazon Web Services (AWS)

- Develop a Generative AI-powered automation pipeline to generate monthly availability reports for Out-of-SLA AWS Redshift clusters, enabling efficient review by Redshift leadership and Amazon VPs
- Save 2-3 developer days per month by architecting a scalable system for data extraction and report generation

Software Engineering Intern

May 2024 – August 2024

Aryn (Seed Startup)

Mountain View, CA

- Constructed open-source code for data-processing and semantic LLM operations to answer analytics questions on unstructured data to core repository; achieved 72% accuracy on query planning/execution of 5-7 step questions
- Created software using Python; utilized AWS, Docker, OpenSearch, Sycamore and OpenAI APIs for development
- Co-authored a technical systems paper on LLM-based unstructured data analytics, presented at CIDR 2025

Full-Stack Software Developer

February 2024 – Present

Semester.ly

Baltimore, MD

- Improve course scheduling platform serving 6,000+ students, enabling semester planning from 10,000+ courses via JHU Student Information System API; core developer on team of 5 for enhancing open-source code library
- Lead projects on increasing usage of student course ratings and an AI-powered course recommendation system
- Utilize TypeScript, React functional components, React-Redux hooks, Redux Toolkit, and Django REST APIs

Mobile App Developer

January 2024 – June 2024

 $dear You\ Health$

Washington, D.C.

- Develop community-driven mental health support platform for target 60%+ college/high school students; specifically worked on multi-page student portal with counselor profile displays and appointment scheduler
- Collaborated with cross-functional team to build iOS/Android application using Expo and React Native for frontend and Google Firebase for backend; future integration of AI models for client-counselor matching

LEADERSHIP

Technical & Organizational Team Leader | BME Undergraduate Design Team

January 2024 – Present

- Lead a team of 8 on an open-ended project addressing foot/gait abnormalities in diabetics, defining project direction using Gantt charts and action plans, and facilitate discussions, prototyping, and iterations
- Guide problem definition, root cause analysis, ideation, and solution conceptualization using JHU CBID and Stanford Biodesign techniques; comprehensive documentation for design history files of over 30 pages each quarter

President | Women in Computer Science at JHU

January 2023 - Present

- Lead organization of around 40 active undergraduates and 300 alumni members; organize professional development and social events with responsibilities of communicating with administrators, exec/general members, and sponsors
- Partner with companies like Bloomberg and Google to host career panels and networking events for 80+ attendees

TECHNICAL SKILLS

- Languages: Proficient in Python, Java, C/C++, JavaScript, TypeScript, x86-64 assembly language, and Arduino
- Web Development: Experience with React, HTML, CSS, Node.js, Express.js, and Nest.js for full-stack applications
- Tools and Technologies: Adept at using Docker, Amazon Web Services (AWS), Google Firebase, OpenSearch, API calls, Figma for project design, Git/GitHub for version control, and IDEs such as Visual Studio Code and IntelliJ IDEA
- Data Science: Skilled in machine learning techniques for analyzing large datasets using PyTorch, NumPy, and Pandas