Tanvi Ranade

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Education

Johns Hopkins University — Baltimore, MD

Bachelor of Science in Computer Science and Biomedical Engineering | GPA: 3.95/4.00 — *August 2022 – May 2026*

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

Experience

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 technical systems paper on LLM-based unstructured analytics to be presented at CIDR conference

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

dearYou 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

Research and Development Engineering Intern — June 2023 – January 2024

CurveAssure (Pre-seed Startup) — *Baltimore, MD*

- Created 3-D demo platform using Python and Blender to illustrate real-time wearable spine/limb sensors movement of a person, serving to aid in tracking and locating spinal injuries; shown at two showcases with 400+ people
- Tested current draw of various sensor configurations using Arduino to determine optimal choice for future designs

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