Harshini Bandaru

Email: bharshini33@gmail.com | Linkedin: harshini-bandaru | Github: https://github.com/lsb40

EDUCATION

University of Pittsburgh **Pittsburgh, PA**
Bachelor of Science in Computer Science; Minor in Information Science *August 2021 - May 2024*
Relevant Coursework: Data Structures and Algorithms, Operating Systems, Database Management, Software Engineering, Human-Centered Systems, Web Applications, Cloud Computing, Systems Software, IT Project Management, Software Quality Assurance, Discrete Structures, Formal Methods in CS, Computer Organization and Assembly Language, Data Science, Social Implications of CS, Analysis of Information Systems
Awards/Honors: Dean's List; Joyce Tokar Scholar; Johns Hopkins Contact Tracing Certificate; AP Scholar with Distinction

WORK EXPERIENCE

Deloitte **Harrisburg, PA**
Solutions Engineering Analyst *October 2024 - Present*
- Developed SQL-driven dashboards in Azure DevOps to track sprint velocity and backlog trends for Government & Public Services
- Led Payments Analytics proposal with KPIs, data model, and deliverables; designed AI app in Figma with full product roadmap
- Engineer web application architectures and process flows in Microsoft Visio; manage test data simulations, documentation, and cross-functional sprint planning for Human Services initiative.

Pentair **Apex, NC**
Software Engineering Intern (IoT Team) *May 2023 - August 2023*
- Architected a full-stack Android Chatbot with a Python backend and a React Native frontend
- Integrated REST and OpenAI APIs while leveraging AWS Cloud infrastructure and Lambda for scalability and real-time performance
- Utilized product documentation for chatbot training, executed 200+ Postman tests, and implemented Bootstrap for web applications

Federated Hermes **Pittsburgh, PA**
Application Developer Intern (ETL Development Team) *January 2023 - April 2023*
- Developed and deployed data integration flows with Boomi, Git, Visual Studio, and BMC Workspace to streamline business processes
- Managed databases and mapped XML data to track certificate expirations with 95% accuracy, ensuring data precision
- Conducted code reviews and promotions to improve software reliability, maintainability, and quality assurance

Federated Hermes **Warrendale, PA**
Application Developer Intern (ACTA-Portal Team) *June 2022 - August 2022*
- Enhanced data access by 25% and reporting efficiency by 20% using Power Apps and Power BI for commercial systems
- Managed integration, messaging systems, and ETL processes, reducing data processing time by 50%
- Developed a project-management Java GUI app with SQL data querying, resulting in an increase in productivity through streamlined meetings, task management, and deadline updates for employees; authored detailed documentation for system architecture and API usage

University of Pittsburgh **Pittsburgh, PA**
Undergraduate Teaching Assistant *January 2022 - April 2022*
- Conducted weekly Java lectures for 20+ undergraduates; taught concepts in OOP and data structures (arrays, linked lists, recursion, graphs)
- Provided 9+ weekly office hours to assist students with key concepts and utilized software tools like Visual Studio, Atom, IntelliJ, and command-line interfaces to enhance their development skills and problem-solving abilities

PROJECTS

Decentralized Healthcare *July 2025*
- Developed a secure, full-stack healthcare consulting platform with React, Firebase Authentication, and Socket.io enabling real-time, role-based challenge and bid management with dynamic routing and stateful session handling

LifeHub *June 2025*
- Developed a full-stack personal health dashboard using React and FastAPI, integrating USDA nutrition APIs to track diet, activity, and wellness metrics, featuring a responsive UI and seamless frontend-backend integration.

Sentiment Analysis Tool *April 2024*
- Automated movie sentiment analysis on Google Cloud using NLP, Cloud Functions, and BigQuery for scalable processing and storage.

Multi-Process and Multi-Threaded Web Servers *October 2023*
- Upgraded a single-threaded web server with multi-process and multi-threaded versions, using fork()/pthread_create() for parallel handling
- Implemented synchronization methods for shared resources and conducted performance analysis, assessing CPU time and throughput

Double-Buffered Graphics Library *September 2023*
- Developed a low-level C graphics library on Linux using system calls, direct framebuffer manipulation, memory mapping, and ioctl calls to efficiently render shapes, handle keypresses, and manage screen output and memory

SKILLS & INTERESTS

Programming Languages: Java, Python, C, C++, JavaScript, TypeScript, SQL, MySQL, HTML, CSS, R, SQLite, JSON, XML
Tools/Frameworks: React, React Native, FastAPI, Flask, Node.js, Tailwind CSS, Material UI, Bootstrap, Firebase (Auth & Firestore), Socket.IO, Docker, Atom, Kubernetes, GitHub Actions, Uvicorn, Postman, Git, IntelliJ, Visual Studio, AngularJS, SQLAlchemy, Boomi Integration Platform, Power Apps, Power BI, Tableau, Microsoft Visio, BMC Workspace, Workbench, Selenium, VisualVM, Figma, WordPress, Kubectl, Nginx, Lambda
Technologies & Concepts: AWS Cloud, Google Cloud Platform, Azure DevOps, RESTful API Design, CI/CD Pipelines, Role-Based Access Control, CORS Configuration, Object-Oriented Programming (OOP), Agile, Scrum, State Management (Context API, Local Storage), System Design, ETL Workflows, Data Visualization, Testing, Virtualization (KVM, QEMU), OpenAI API, Pandas, Scikit-learn, Linux, DOM, AJAX

LEADERSHIP EXPERIENCE & ACTIVITIES

Minorities Association in Computing, *Vice President* *August 2022 - April 2024*
- Managed sponsorships with School of Computing faculty, coordinated reimbursements, led training, and maintained sponsor relationships