

PARMINDER SINGH

Software Developer

☎ +1(317) 417-4823 · ✉ psingh13dev@gmail.com · [in linkedin.com/psingh20](https://www.linkedin.com/psingh20) · github.com/paramsingh77 · 📍 Dallas, TX

WORK EXPERIENCE

Computer Science Research Assistant & Tutor

January 2023 - May 2024

University of North Alabama

Florence, AL

- Elevated student performance in web development, statistics, and data structures by creating and deploying interactive, project-based learning modules with React, Node.js, Go, and MongoDB, resulting in significantly higher project scores.
- Conducted over 200+ hours of tutoring in MERN stack and Artificial Intelligence technologies, significantly boosting students' practical skills and preparation for preparation for industry projects
- Devised and refined comprehensive curricula on SQL and NoSQL databases, which increased students' proficiency by 30% as measured by pre- and post-assessment scores, focusing on relational database best practices and industry compliance
- Designed and facilitated customized training sessions focusing on advanced data structures and algorithms, resulting in a 40% improvement in student code efficiency and proficiency under exam conditions using Python and C++.

SKILLS

- **Programming Languages:** C / C++ , Java, JavaScript ,Python , Shell Scripting
- **Back End Development:** Node.js, Express, Spring, Flask, CI/CD , junit , Rest API
- **Front End Development:** ReactJS, Redux, Bootstrap (responsive design , UI) , Materialize, HTML,CSS, Witty
- **Data Pipelines:** Amazon AWS, Recommendations, Collaborative filtering, Machine learning, MongoDB , Kafka , Redis
- **Version Control:** Git, GitHub, Gitea, Docker, Kubernetes

PROJECTS

Find Near Me 🔗

February 2024 - May 2024

Technologies: React.js, Flask, Numpy, MongoDB, Machine Learning, Restful API

- Developed 'Find Near Me', a full-stack application, enhancing local search for 40+ Coffee shops and Restaurants using the K-Nearest Neighbors classification Algorithm, boosting efficiency and accuracy by 30% and 50%, respectively.
- Processed over 1,000 daily location queries in a cloud-based application, demonstrating proficiency in real-time data processing and cloud-native service integration, enhancing user responsiveness.
- Constructed with React.js (frontend) and Flask (backend), achieving robust user stories , user interactions and server-side efficiency; distinguished by receiving 2nd place at a campus-wide Hackathon for our innovative approach to real-time navigation solutions.
- Collaborated with a cross-functional team to develop UX and optimize the K-nearest neighbor algorithm using Numpy, enabling real-time processing of JSON data for enhanced location services. This initiative increased user location accuracy by 20% and ensured seamless API integration for precise geographic tracking.
- Conducted code reviews and Unit test after every iteration for CI/CD to ensure code quality and catch issues early.
- Led a cross-functional project team to streamline communication and collaboration between teams, resulting in a 20% increase in efficiency and a 15% reduction in project timeline, showcasing strong leadership and teamwork skills.

Enterprise Risk Navigator 🔗

December 2023 - January 2024

Technologies: C++, Wt Library (Framework), MySQL , OAuth , Git

- Spearheaded the development of a robust open-source risk management tool in C++ with Wt Library and MySQL, serving 100+ users and 16+ admins in finance and healthcare, enhancing compliance and product management. .
- Engineered a user authentication system that enhanced security protocols and administrative functionalities within a cloud environment, resulting in a 30% improvement in user access management by applying cloud-native services and DevSecOps best practices.
- Utilized Object-Oriented concepts and Agile methodologies throughout the Software Development Life Cycle (SDLC), enhancing team productivity and reducing development errors by 30%, including frequent Scrum sessions.
- Integrated risk handling features, allowing admins to create, modify, and delete risk entries, improving response times by 15%. This included debugging protocols and testing frameworks to ensure software reliability.

ACCOMPLISHMENTS

- **Achieved 1st Rank for Capstone project " Enterprise Risk Navigator" At Techathon at Birmingham.**
- **Achieved the 2nd Rank in a campus hackathon** – Spearheaded the development of an AI-driven web application for local place recommendations, enhancing user engagement through complex AI techniques.
- **Excelled in the International Collegiate Programming Contest (ICPC)** – Resolved 7 out of 11 complex problems, demonstrating superior skills in Data Structures and Algorithms, significantly outperforming global competitors.

EDUCATION

Bachelor of Computer Science,

University Of North Alabama

July 2019 - May 2024

GPA: 3.61