Supriya Dua

+1-778-317-2524 | supriyadua24@gmail.com | linkedin | github

TECHNICAL SKILLS

Languages: C#, Java, Python, C/C++, JavaScript, TypeScript, HTML/CSS
Frameworks: .NET, Vue.js, React, Node.js, Aurelia.js, Angular
Developer Tools: Git, Docker, VS Code, Visual Studio, IntelliJ, Tomcat
Cloud/Databases: AWS, Azure DevOps, CI/CD, MongoDB, PostgreSQL
Operating Systems: Linux (Ubuntu), Windows, macOS

EXPERIENCE

Software Developer   Apr 2024 – Present
HiringBranch
- Created a Java-based proxy layer to route legacy monolith requests to new microservices, improving response times approximately by 30%
- Developed a C# .NET 9 API for a content management system with 80% test coverage, using MediatR with CQRS and PostgreSQL, improving scalability for future features.
- Developed and maintained production-grade RESTful microservices in C# .NET 8, with 85% test coverage, enabling seamless integration with React frontend, reducing manual data handling for internal users.
- Integrated FusionAuth into the JavaScript frontend, enabling secure authentication, and streamlined user login.
- Deployed services using Docker and Helm, ensuring smooth environment transitions and improved CI/CD reliability.

Software Developer Intern   May 2023 - Aug 2023
HiringBranch
- Built a CronJob-based scheduling system in C# .NET to automate candidate notifications, using MongoDB time-based queries to trigger actions.
- Wrote unit tests with 80% coverage to ensure reliability and accuracy of the CronJob application.

QA Lead   Sep 2021 - Apr 2023
HiringBranch
- Repaired and enhanced Java-based Selenium tests for user workflows, increasing regression test coverage by 10% across platform.
- Built Python scripts to validate speech-based scoring, improving accuracy and reducing manual verification time.

PROJECTS

Pagerank Algorithm (Distributed Systems) | *C++, Message Passing Interface (MPI)*
- Implemented a distributed version of the PageRank algorithm using message-passing (MPI) to scale across nodes and reduce computation time by 67% on large graph datasets.
- Applied vertex decomposition techniques to simulate high-throughput backend computations in distributed systems.

Smart-RC Car (Embedded Systems) | *C++, Node.js, Multi-threading*
- Engineered an embedded system application in C++ for a self-driving car, integrating distance sensors and a gyroscope for real-time obstacle avoidance.
- Optimized performance with multithreading, ensuring parallel processing of sensor inputs.
- Developed a Node.js-based monitoring dashboard, enabling tracking of vehicle navigation.

BluePrint Website (SFU BluePrint) | *React, Tailwind CSS*
- Built the member directory using React Map and components, making it easier for nonprofits to identify and connect with the organization.
- Enhanced the website's visual appeal by styling components with Tailwind CSS for a professional online presence.

Quiz Maniacs (Web System Architecture) | *JavaScript, Vue.js, Google Firebase, Microservices Architecture*
- Architected a classroom quiz application using a microservices-style backend deployed to Google Firebase.
- Integrated frontend with backend APIs using HTTP requests in Vue.js for dynamic, real-time updates.

EDUCATION

Simon Fraser University   Burnaby, British Columbia
Bachelor of Science in Computer Science