

Riteshwar Brar

riteshwarbrar@gmail.com | [LinkedIn](#) | 608-724-4822 | Open to relocation | [Portfolio](#) | [GitHub](#)

EDUCATION

University of Wisconsin - Madison
Bachelor of Science in Computer Science

Madison, WI
Graduation Date: May 2024

SKILLS

Programming Languages and Technologies: C/C++ , Java , Python , JavaScript , Ruby , React.js, C# , .NET , Git , Linux , RESTful APIs , Node.js , Express.js , MongoDB , MySQL , React Native , AWS , Google Firebase , Jenkins , GitHub Actions , Agile Methodology.

Certificates: AWS Certified Cloud Practitioner [CLF-C02]

Coursework: Data Structures and Algorithms , Object Oriented Programming , Discrete Mathematics, Operating Systems , Web Development , Continuous Integration and Development , Version Control , Machine Learning , Mobile Application Development, Data Science Programming , Computer Vision, Deep Learning , Web frameworks , A/B Testing , UI/UX , Data Visualization , Database management, Cloud Computing.

WORK EXPERIENCE

Volvo Cars USA
Software Engineering Intern

Mahwah, NJ
Jun 2023 – Aug 2023

- Reduced API downtime by 70% by implementing over 60 synthetic checks with automated alerting through Apica's automation tools, resulting in enhanced monitoring and support of all application endpoints.
- Partnered with engineers from other teams for developing dashboards using telemetry data, aimed at optimizing team efficiency leading to a 30% improvement in data visibility and operational clarity.
- Spearheaded bi-weekly meetings planning a blueprint for future dashboards ensuring uniformity along all the teams with compliance to company user-interface specifications.

PROJECTS

Online Art Store | Web Application | [link to website](#)

JavaScript , Firestore Database , Firebase Authorization , React.Js , Node.Js , PayPal Buttons , HTML/CSS

- Collaborated with an established Artist to develop an online platform to sell paintings leading to an increase in customers by 40% and an increase in social media followers by 15%.
- Implemented safer payment methods for consumers through industry-level encryption using PayPal Buttons to accept multinational payments via Credit Cards, reducing chances of payment fraud by 100%.
- Developed an accessible inventory system, allowing only admin to update inventory through CRUD operations without any prior database training, using a simplistic UI and OAuth 2.0, improving data accuracy by 35%.

Operating Systems | Memory Management in xv6

C , Linux , xv6 OS

- Memory Mapping: Implemented a system call to calculate map memory from a process's virtual address space to physical memory.
- Two Modes of Operation: Similar to the mmap system call in the Linux kernel, implemented anonymous memory allocation like malloc, and a file-backed mapping which creates a memory representation of a file.
- Shared and Private Mapping: The system call uses flags to decide whether a process and its child share mapping or have their own individual set of the physical pages

Optimal Flight Path Calculator | Desktop Application

Java , JavaFX

- Developed an application that finds the most time efficient path from one airport to another using Dijkstra's algorithm and a priority queue.
- Kept track of 300+ airport pairs along with the time between them in a CSV file which is read and converted into a weighted graph.