Permanent Address: 14950 Hopewells Landing Drive, Gainesville, VA, 20155

Agrim Sharma

agrimsharma571@gmail.com (703)-839-5290

Current Address: 1819 Jefferson Park Avenue, Charlottesville, VA, 22903, Unit 101

Education

University of Virginia, Charlottesville, VA Bachelor of Science, Computer Science

May 2025

Relevant course work: Data Structures and Algorithms, Discrete Mathematics, Software Development Essentials, Advanced Software Development, Computer Systems and Organization, Algorithm Analysis, and Linear Algebra

Professional Experience

Giesecke + Devrient, Sterling, VA

May 2023 - August 2023

Software Engineer Intern

- Developed a high-performance .NET program in C# that efficiently compared data from a set of files with ASN.1 encoding to an Excel file, identifying matches accurately and reducing manual effort, resulting in over 500 hours of saved time for the organization.
- Designed and implemented a high-performance web application with React and GraphQL, reducing lookup time by 50% and optimizing SIM card client search using real-time MySQL data.
- Collaborated with test engineers to implement a robust C#/C program using AES decryption algorithms to securely decrypt sensitive eSIM data, leveraging a custom C DLL for encryption methods and user authentication.

ILITE Robotics, Haymarket, VA

November 2019 - June 2022

Lead Software Engineer

- Orchestrated and guided a high-performing team of 7 students in an agile development setting, resulting in the creation of an award-winning (Innovation in Control winner) 15,000 line codebase within an impressive two-month timeline.
- Demonstrated exceptional project management skills in overseeing a codebase with autonomous path following, PID controllers, control theory implementations, CSV logging for data analysis, and organized build management using Gradle.
- Spearheaded a subproject for a robust computer vision pipeline to enhance robot driving capabilities, leveraging image processing techniques for tasks such as object detection, lane tracking, and obstacle avoidance.

Personal Projects

- **Course Review System**: Created a JavaFX-based course review system with an SQLite database, supporting course and review management, user login, and access control. Implemented using TDD and SOLID principles for robustness and maintainability.
- **Course Compass**: UVA SIS chrome extension built using React and Typescript to personalize courses using student interests and degree progress. Utilizes ChatGPT 3.5 API on a Python backend to provide answers for student's questions.
- Advanced Physics Simulation: WPF C# .NET application showcasing real-time, interactive simulations based on Newton's Laws, visually demonstrating the mathematical relationships between different parameters and its dynamic effects on physical objects.
- **Battleship**: Developed an ASP.NET web app replicating the popular battle game with a custom heatmap algorithm for ship tracking and destruction. Randomizes ship throughout the board per user discretion.

Technical Skills

- Programming Languages: C#, Haskell, Java, Python, C++, C, Kotlin, SQL + PL/SQL, JavaScript, Typescript
- **Computer Software & Technologies**: Git/GitHub, Gradle, PowerShell, MATLAB, LabVIEW, .NET Framework, AutoCAD, Autodesk Inventor, Microsoft Office, Sharepoint, Unity, React, GraphQL
- Certifications: Northern Virginia Community College (NVCC) Database Career Studies Certificate

Additional Information

- **Linkedin**: www.linkedin.com/in/agrim-sharma-50b68423b
- **GitHub**: https://github.com/agrimreaper49