Jaikrishna (Jai) V. Raghavan

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EDUCATION

University of Maryland

College Park, MD

May 2025

B.S. Computer Science, Minor in Linguistics

GPA: 3.72

Honors College, University Honors

TECHNICAL EXPERIENCE

Germantown, MD

Software Engineering Intern - PC Apps

Jun 2024 - Present

- Tested and resolved errors in multi-threaded .NET applications to reduce failure rate by 20%.
- Developed a configurable User Interface for automating quality control procedures at production sites.
- Worked in an agile development environment for stakeholders in process engineering and software quality
- Optimized validation procedures in playlist loading scripts to reduce validation errors by 25%.

Senseonics

Germantown, MD

Jun 2023 - Aug 2023

 $Software\ Engineering\ Intern\ -\ PC\ Apps$

- ullet Developed the frontend of a Quality Control automation app using ${\bf C}\#,$ Visual Studio, and .NET
- Created several interactive forms to process user input and execute commands from a .CSV file.
- Applied principles of **object-oriented design** to encapsulate UI components.

Senseonics

Germantown, MD

Jun 2022 - Jul 2022

Process Development Intern

- Refactored an **ASP.NET** web application to generate a .CSV file with live data for over 10,000 transmitters.
- Migrated transmitter firmware version data from a Microsoft SQL Server to the application.
- Enabled categorization of data by product type to improve process development data analytics.

SKILLS AND COURSEWORK

Programming: Java, C#, C, JavaScript, TypeScript, Python, Ruby, OCaml, Haskell, Kotlin

Tools/Frameworks: .NET, Node.js, Express, MongoDB, React.js, Bootstrap, Git, Linux, Jira, Docker

Coursework: Advanced Data Structures, Compilers, Computer & Network Security,

Computer Systems Architecture, Programming Handheld Systems

Projects

Fantasy Football Data Lookup - MongoDB, Express, React.js, Node.js, Bootstrap

- Developed a full stack web application that allows users to search for fantasy football data.
- Accessed NFL player game and season usage data using ESPN's REST API endpoint.
- Leveraged Node.js and Express for backend routing and MongoDB to store player data.
- Designed functional components using **React.js** and **Bootstrap** to retrieve and display data in the frontend.

MiniDafny - Haskell

- Implemented a subset of Dafny, a verification-based programming language.
- Created an applicative-based parser to generate an abstract syntax tree from input text.
- Generated **verification conditions** for each statement by calculating the weakest preconditions according to Hoare Logic rules.
- Passed verification conditions to Z3, a Microsoft SMT solver, to verify programs.

Honors and Distinctions

Dean's List

National Merit Scholarship

National Merit Scholarship Corporation

Sep 2021 - May 2025

University of Maryland Spring 2022 - Present

University of Maryland

Oct 2022 - Present

Alpha Lambda Delta Honor Society