

# Bijan Sharifi

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<https://bijansharifi.github.io>

## EDUCATION

University of Maryland-College Park

Bachelor of Science: Computer Science

Boston, MA/College Park, MD

Class of 2025

Cumulative GPA: 3.4/4.0

**Relevant Coursework:** Object Oriented Programming, Data Structures, Discrete Structures, Computer Systems, Algorithms, Organization of Programming Languages, Calculus I & II, Linear Algebra, Statistics for Engineering and the Sciences, Advanced Data Structures, Data Science

**Certifications:** Honors Student

**Skills:** Proficient Programming Languages: Java, C, Python, OCaml, Ruby, Haskell, Linux, Scheme, Rust, JavaScript, TypeScript, MATLAB, LaTeX, Excel, Word, Tableau

## PROFESSIONAL EXPERIENCE & PROJECTS

### AngioWave Developer (Python)

Internship (Boston MA)

- Worked with a team of developers and interns at SpectraWave to develop an A.I model used to analyze angiograms

### Language Translator (Ruby)

Developer

- Fully functioning translator that can convert from one language to another given that language's lexicon and grammar structures.

### Lexer, Parser, and Interpreter (OCaml)

Developer

- Program that generates a token list from an input string, which then creates a parse tree, which is then used by the interpreter to give/check meaning to the tree. All the tools needed to create own programming language.

### Data Structures Implemented

Developer

- Fully functioning Binary Search Tree recursively. Efficient search, insertion, deletion (Java)
- Weighted graph data structure with ability to traverse with breadth first, depth first, and lowest cost path to a vertex (Implemented Dijkstra's algorithm) (Java)
- LinkedHashSet implemented for fast ordering (Java)
- Various in place and out of place sorting algorithms on lists (C, Java, Ruby)

### Regular Expression Engine/NFA-To-DFA(OCaml)

Developer

- Program that generates Regex from an NFA , as well as converting an NFA to a DFA

### Computer Systems

Developer

- Coded various basic recursive functions in MIPS Assembly (MIPS)
- Implemented a fully functioning shell with piping and exec functions to give commands to computer(C)
- Implemented a Grade Calculator (C)

### Other Projects

Developer

- Language translator that maintains proper grammar structure across the various languages(Ruby)
- Fully functioning basic unit converted, can go from metric to imperial (and vice versa) and includes temperature conversions (Java)
- Poker and blackjack games (Java)

### Minimum Snippet

Developer

Program that finds the smallest section of characters between two specific characters given a document. Used to parse data. (Java)

## LEADERSHIP & EXTRACURRICULAR ACTIVITIES

### Junior Youth Spiritual Empowerment Program

Boston, MA

Animator

January 2018 – Present

- Created, led, and evaluated 20+ both in-person and virtual camps/ retreats, program curricula, arts programming, healthy recreation activities, and service projects
- Liaised with administrators of public schools, recreation centers and other community organizations to identify students in need and cultivate resources for the empowerment program

## INTERESTS

**Interests:** Health & Wellness, podcasts on AI, Space exploration, Travel, Dogs, Boston Celtics, Golf

**Languages:** English (Native), Spanish (Intermediate), Farsi (Intermediate)