

# 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, SQL, Linux, Scheme, Rust, JavaScript, TypeScript, MATLAB, Git, Excel, Tableau

## PROFESSIONAL EXPERIENCE & PROJECTS

### AngioWave Developer

*Internship (Boston MA)*

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

### Technology Consultant

*App Development Collaborator*

- Worked with a local startup High St. Lawn Unlimited LLC. to create an app for their clients to increase revenue.
- Helped determine conceptual implementation strategies, helped solve problems, and provided support to inexperienced developers.

### 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 converter, can go from metric to imperial (and vice versa) and includes temperature conversions (Java)
- Poker and blackjack games (Java)
- Minimum Snippet 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

*Animator*

**Boston, MA**

*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