# **DYLAN PATEL**

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### **EDUCATION**

## University of Maryland, College Park MD

GPA: 3.5/4.0 Expected: May 2025

B.S. Computer Science (Machine Learning Track) Dean's List Fall 2021 & Spring 2022

#### **Relevant Coursework**

 Object Oriented Programming I & II, Calculus I & II, Linear Algebra, Discrete Structures, Computer Systems, Algorithms, Organization of Computer Languages, Introduction to Data Science

#### **Technical Skills**

• Java, Linux, C, Assembly, Ruby, OCaml, Rust, MATLAB, Git, Agile Workflow

## **PROJECTS**

OCaml Interpreter April 2023

- Developed an OCaml interpreter comprised of a custom built lexer, parser, and evaluator
- Designed lexer to tokenize input strings and parser to place tokens in an abstract syntax tree based on a context free grammar
- Constructed an evaluator to traverse the abstract syntax tree and map it to a value using operational semantics in the algorithm

MicroShell November 2022

- Built a custom shell from scratch in C capable of supporting boolean operations, pipes, and file redirection
- · Executed basic shell commands and operations by traversing a parse tree and using system calls such as pipe, fork, and dup
- · Leveraged inter-process communications to execute commands concurrently and improve performance

Orders Processor August 2022

- Architected using multi-threading programming techniques in Java
- Concurrently processes multiple orders of unique items based on a customer's purchase history by reading large data files
- · Provides a statistical summary showing the quantity of items purchased and total amount in sales made

#### WORK EXPERIENCE

Lockheed Martin Moorestown, MJ

Radar Systems Engineer Intern

June 2023-August 2023

- Utilized Agile methodologies to support the Integration and Test team for the Aegis Ballistic Missile Defense (BMD) System
- Designed and implemented data validation scripts in MATLAB, automating regression testing for current and future BMD builds
- Conducted analysis and evaluation of radar performance using data collected from lab demonstrations and tests
- Served as the Lead Software Developer for an Autonomous Reconnaissance Robot, overseeing the entire product lifecycle

### **EXTRACURRICULAR INVOLVEMENT**

## **University of Maryland Interfraternity Council**

College Park, MD

Vice President of External Affairs

Spring 2023 – Fall 2023

- Sustained external relations with key stakeholders including SGA, University administrators, and the City of College Park
- Initiated a weekly trash cleanup program in collaboration with City Council to improve relations between students and residents
- Managed a budget of ~100k to plan and organize gatherings of up to 5,000 students to strengthen harm reduction on campus

Zeta Psi Fraternity

College Park, MD

Secretary

Spring 2023 – Fall 2023

- Coordinated housing arrangements for 86 members to find them affordable homes to live in during the school year
- Networked with landlords around College Park to assist them in finding tenants for their rental properties
- · Facilitated contract negotiations and oversaw lease agreements fostering a mutually beneficial relationship between both parties

## **Google Student Developer Club**

College Park, MD

Member

Fall 2022 - Present

- Took part in hands-on workshops to learn about Google developer technologies and industry relevant software engineering skills
- Worked closely in a peer-to-peer learning environment to create projects and solutions towards current challenges in the community

## **Ten Terp Plan for Sexual Assault Prevention**

College Park, MD

Volunteer

September 2022 – November 2022

- Voluntarily participated in a ten-week workshop dedicated to preventing sexual assault at the University of Maryland
- Actively worked to create a positive cultural change in the community by discussing how sexual assault can be prevented and
  ways to provide support to individuals who may be victims