

# ARJUN VAIDYA

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## EDUCATION

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### UNIVERSITY OF MARYLAND

Aug 2021 – May 2025

#### Computer Science, BS

Cumulative GPA: 4.0/4.0; Dean's List 2021-2023, OMSE Academic Excellence Award

Coursework: Object Oriented Programming, Data Structures, Algorithms, Computer Systems, Discrete Mathematics, Compilers

## PROFESSIONAL EXPERIENCE

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### DOW JONES, OPIS

Jun 2023 – Aug 2023

#### Software Engineering Intern

- Acquired proficiency in React, Redux, Typescript, and Azure DevOps through self-directed learning.
- Developed a dedicated web page on the production site to monitor and communicate release notes to users.
- Created an intuitive grid view using card-based elements, enhancing data presentation and user accessibility.
- Devised a scalable approach for integrating themes and storing application data efficiently.
- Increased test coverage for site management feature by 50%.
- Actively engaged in weekly scrum sessions, resolving rendering issues and tackling bugs identified by SonarQube.
- Participated in weekly database management and AI integration meetings.

### DEPARTMENT OF COMPUTER SCIENCE, UMD

Aug 2022 – Present

#### Teaching Assistant

- Object Oriented Programming I in Fall '22 and Object Oriented Programming II in Spring '23 taught by Prof. Fawzi Emad.
- Responsible for assisting students with course material, host office hours, supplement instructional content, and grade assignments.

### INSTITUTE FOR SYSTEMS RESEARCH (ISR), UMD

Jun 2022 – Aug 2022

#### Research Intern

- Proposed data-driven metareasoning algorithm for Perimeter Defense Problem with guidance from Dr. Jeffrey Herrmann.
- Performed Agent Based Simulation Modeling for assimilating data based on performance of available algorithms.
- Applied Exploratory Data Analysis (EDA) techniques and Linear Regression using Python Data Science packages.
- Developed mathematical model for predicting logical scenario-classes with 78.08% accuracy.

## PROJECTS

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### SPEECHIFY, BITCAMP HACKATHON

April 2023

- Awarded People's Choice Hack (out of 125 projects).
- Incorporated Optical Character Recognition (OCR), Flutter, Python Flask and TTS to assist dyslexic users in reading text.

### PROJECT TANGO

April 2022

- Designed and executed a full-stack platform to identify individuals with similar music interests.
- Engineered backend for assimilating data from Spotify's API using CockroachDB and SQL.

### QUANTUM MACHINE LEARNING, UMD FIRE

Aug 2022 – Dec 2022

- Developed a quantum noise model to simulate and measure error thresholds for logic gate operations using IBM Qiskit.
- Summarized and presented findings in collaboration with team members and mentor Dr. Shabnam Jabeen.

### AUTONOMOUS UNMANNED SYSTEMS, UMD FIRE

Aug 2021 – May 2022

- Collaborated with team members and Dr. Nitin Sanket to develop motion planning algorithms using drones.
- Applied Computer Vision techniques on video and image input data for object detection using OpenCV.

## ADDITIONAL

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**Skills:** Java, Python, C, Ruby, Rust, OCaml, SQL, Javascript, Typescript, React, Jest, HTML, CSS, Azure Devops, Github

**Poster Presentations:** Maryland Robotics Center Research Symposium, May '22 and UMD FIRE Symposium, Nov '22.