# **Alex Shrestha**

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#### Education

# **University of Maryland**

College Park, MD

Expected 2026

Bachelor of Science - Computer Science

- Banneker/Key Scholar
- Advanced Cybersecurity Experience for Students (ACES) Honors College
- GPA: 3.83

Relevant Coursework: Quantum Computing, Data Structures & Algorithms, OOP, Discrete Math, Cybersecurity

# Experience

## **Northrop Grumman**

Linthicum, MD

Software Engineering Intern

Jun. 2024 - Aug. 2024

- Led the redesign for team's website creating 4 subsites in HTML/CSS & JS to boost awareness of services by 50%
- Assembled an app in Power Apps to streamline monthly diagram approvals, automating 20+ manual steps
- Documented the full development process for both projects and trained 4 team members for a seamless handover
- Facilitated weekly stakeholder meetings with 10 stakeholders to align project direction in an Agile Environment
- Presented technical results and applications of both projects to 75 total VPs, project leads and members in meetings

#### Technical Skills

**Languages**: Java, Bash Shell Scripting, Python, C, HTML/CSS, JavaScript, React/React Native, Assembly, OCaml, Rust **Tools**: Git, Unix/Linux, JUnit, VS Code, Jupyter Notebook, Vim, PowerShell, MATLAB, Power Platform, Jira, Figma

#### Extracurriculars

## **US News Project Team**

College Park, MD

Software Engineering Shadow

Sep. 2024 – Dec. 2024

- Constructed a site to help streamline data from 1000s of universities by over 30% and significantly reduce errors
- Implemented key frontend features and updates with React, CSS and Figma in order to optimize the site's design
- Contributed within an Agile team to drive collaborative solutions, design UI/UX features and improve efficiency

## **Product Space**

College Park, MD

**Product Management Fellow** 

Sep. 2024 - Dec. 2024

- Gained hands-on experience with the full product management lifecycle and enhancing key skills at each stage
- Ideated a new product concept by extracting its core features and continuously improving it based on team insights

## App Dev Club

College Park, MD

Bootcamp Member

Feb. 2024 - May 2024

- Completed a selective 10-week bootcamp to master essential frontend and backend skills with 30 other students
- Engaged with professionals and mentors, obtaining first-hand insights into best software practices for all projects

## **Projects**

## **Honeypot System** | Bash Shell Scripting, Python, Git

Sep. 2024 - Dec. 2024

- Engineered 5 honeypot containers receiving 9000+ attacks on a Linux environment simulating academic settings
- Automated container deployment, recycling and data collection with forever processes, MITM and firewall rules
- Employed Pandas and Matplotlib to create violin charts, visualizing duration and commands vs banner level
- Conducted ANOVA and Kruskal-Wallis tests with Statsmodels to analyze and establish relationships in the data

## Touch Grass App | React Native, JavaScript, CSS, Git

Apr. 2024

- Directed frontend work for a social-media app at Bitcamp Hackathon, making 3 screens to store and view photos
- Collaborated within a team of 4 leveraging Git to streamline advancements, merge all code, and ensure cohesion

#### Maze-to-Graph Solver | Java

Dec. 2023

- Transformed complex mazes up to 100x100 into graphs by mapping 1000s of junctures to an x-y coordinate system
- Applied Dijkstra's algorithm, breadth-first and depth-first searches to find the optimal solution with 100% accuracy