

# Alex Shrestha

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## Education

### University of Maryland

Bachelor of Science – Computer Science, Minor – Economics

College Park, MD

Expected 2026

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

**Coursework:** Quantum Computing, Data Structures & Algorithms, Object Oriented Programming, Linear Algebra

## Work Experience

### Northrop Grumman

Software Engineering Intern

Linthicum, MD

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

## Experience

### Breakerspace Research

Cybersecurity Research Assistant

College Park, MD

Jan. 2025 – Present

- Detecting patterns in fraudulent dating accounts, improving detection accuracy by 30% analyzing 1000+ profiles
- Developing a web scraping tool using Python to automatically identify flaws in dating profiles targeting older adults
- Investigating 100+ previous romance scams to identify gaps, and creating recommendations to mitigate scams

### US News Project Team

Full Stack Engineer

College Park, MD

Sep. 2024 – Present

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

### Product Space

Product Management Fellow

College Park, MD

Sep. 2024 – Present

- Gaining hands-on experience with the full product management lifecycle and enhancing key skills at each stage
- Ideating a new product concept by extracting its core features and continuously improving it based on team insights
- Conceptualizing a PM lecture for a class enhancing student knowledge and incorporating necessary industry insights

## 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

### 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

## 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