Alex Shrestha

ashrest6@terpmail.umd.edu | Baltimore, MD | shresthaa23.github.io/shrestha-site/ | linkedin.com/in/shrestha2023/

Education

University of Maryland College Park *Expected May 2027*

Bachelor of Science in Computer Science, Minor in Economics | GPA: 3.8

Banneker/Key Scholar; Cybersecurity (ACES) Honors College

Courses: Data Structures, Algorithms, Object-Oriented Prog., Computer Security, Data Science, Linear Algebra, Calc

Work Experience

Leidos Edgewood, MD

Software Engineering Intern Jun. 2025 – Aug. 2025

- Engineered an end-to-end facial comparison service in C#/.NET enhancing identity verification accuracy by over 30% and utilized named pipe communication to enable secure, real-time image transfer between client and server
- Saved $10,000s annually with in-house hosted background service, eliminating dependency on third-party services and accelerating program-critical project 25% faster than planned, achieving key milestones ahead of schedule
- Built robust unit tests with MSTest, achieving >90% coverage and reducing deployment defects once in production
- Documented development lifecycle and user guide to enable simple access and to main integrity post-handoff
- Delivered 6 interactive Power BI reports visualizing complex data enabling data-driven business decisions

Dalex Softworks Holdings Remote

Software Engineering Intern Jun. 2025 – Present

- Developing AI-powered job applications by generating tailored resumes and cover letters for each specific role
- Building features to support dynamic job boards with personalized data with React, Python, Flask and MongoDB
- Operating directly with the CEO in a fast-paced environment to coordinate strategic initiatives and deliverables

Northrop Grumman Linthicum, MD

Software Engineering Intern Jun. 2024 - Aug. 2024

- Led development for team's website with HTML/CSS & JS, boosting awareness of key services for 100s of engineers
- Streamlined 20+ steps and cut process time 60% by developing an automated, centralized app in PowerApps
- Coordinated weekly cross-functional meetings to align project direction, receive feedback and present updates
- Presented technical results of both projects to 75 VPs and members to showcase work and pass ideas off to others

Project Experience

Breakerspace Research | *Cybersecurity Research Assistant @ UMD* Jan. 2025 – Present

- Prototyping browser extension verifying legitimacy of website URLs against whitelist of 100s of trusted companies
- Investigating reports of romance scams to identify gaps in literature and form suggestions to mitigate future scams
- Developing an automated web scraping tool in Python to collect and process account information with API requests
- Analyzing 20,000+ profiles to detect common features in fraudulent accounts, improving accuracy by >20%

US News Project Team | *Full Stack Engineer @ UMD* Sep. 2024 – May 2025

- Accelerated efficiency by 50% automating notebook creation with Flask endpoints and parameterized templates
- Converted static PDFs to dynamic documents simplifying access and implemented key interactive site features
- Implemented frontend enhancements with React to optimize the design and support for a robust data pipeline

Honeypot System | *Bash Shell Scripting, Python, Git* Sep. 2024 – Dec. 2024

- Deployed 5 Linux containers receiving 9000+ cyberattacks simulating secure product and network environments
- Automated container lifecycle for 24/7 operation, capturing data with MITM and reducing setup time to minutes
- Leveraged Pandas and Matplotlib to create visualizations of real-time system monitoring and attacker information

Technical Skills

Languages: Python, Java, C#, C, JavaScript, TypeScript, SQL, Rust, Bash Shell, HTML/CSS, OCaml, Assembly

Frameworks: React, Node.js, Flask, Linux/Unix, .NET, Qiskit, Pandas, NumPy, Matplotlib, JUnit, MSTest, JSON, Agile

Dev Tools: Git, Docker, Postman, MongoDB, MATLAB, PowerShell, GDB, Valgrind, Rest API, Figma, Jira, PowerBI