Alex Shrestha

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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: Quantum Computing, Data Structures, Algorithms, Object-Oriented Programming, Linear Algebra, Calc III

Experience

Leidos   Edgewood, MD
Software Specialist Intern   Jun. 2025 – Present
- Engineering end-to-end facial comparison service using C#/.NET, integrating named pipe communication for real-time secure image transfer between client-server streams and enhancing identify verification accuracy by over 30%
- Eliminating dependency on third-party services, saving $1,000s by building in-house hosted background service
- Building comprehensive unit tests with MSTest to validate algorithms and mechanisms, achieving >90% coverage
- Documenting development lifecycle and user guide to enable simple access and to maintain integrity post-handoff

Dalex Softworks Holdings   Remote
Software Engineering Intern   Jun. 2025 – Present
- Prototyping design AI-powered job applications by generating tailored resumes and cover letters for each role
- Building features to support dynamic job board with personalized data with React, Python, Flask and MongoDB

US News Project Team @ UMD   College Park, MD
Full Stack Engineer   Sep. 2024 – May 2025
- Constructed a robust data ingestion pipeline to analyze university metrics, centralizing data and reducing errors
- Accelerated efficiency by 50% automating notebook creation with Flask endpoints and parameterized templates
- Implemented dynamic frontend enhancements using React and CSS to optimize the design and support analytics

Breakerspace Research @ UMD   College Park, MD
Cybersecurity Research Assistant   Jan. 2025 – May 2025
- Investigated reports of romance scams to identify gaps in literature and form suggestions to mitigate scams
- Developed an automated web scraping tool in Python to collect and process all necessary information of accounts
- Analyzed 20,000+ profiles to detect common features in fraudulent accounts, improving detection accuracy by 20%

Northrop Grumman   Linthicum, MD
Software Engineering Intern   Jun. 2024 - Aug. 2024
- Led development for team's website with HTML/CSS & JS hosted on Azure to boost awareness of services by 50%
- Streamlined and removed 20+ manual steps by developing an automated, centralized process in PowerApps
- Coordinated weekly cross-functional meetings to align project direction, receive feedback and present updates

Projects

Browser Buddy Extension | *React, TypeScript, CSS, Git*   Apr. 2025
- Promoted wellbeing, health and fitness by developing a virtual pet extension forcing users to take active breaks
- Increased user experience and clarity by 40% by integrating feedback-driven UI changes constantly by peers
- Collaborated closely to ideate, design and build a functional MVP in under 24 hours at Bitcamp Hackathon

Honeypot System | *Bash Shell Scripting, Python, Git*   Sep. 2024 – Dec. 2024
- Engineered 5 Linux containers receiving 9000+ attacks simulating secure product and network environments
- Automated container deployment to streamline container lifecycle and data collection with MITM and forevers
- Employed Pandas and Matplotlib to create visualizations for real-time system monitoring and attacker information

Technical Skills

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

Tools: Linux/Unix, Git, .NET, Pandas, NumPy, JUnit, PowerShell, VS Code, Jupyter, Matlab, MS Office, Agile, Jira