

NATHAN DIXON

WASHINGTON, DC

njdixon23@gmail.com | 617-435-2338 | nathandixon.dev | GitHub: [nateJDXN](#) | LinkedIn: [nat3dixon](#)

EDUCATION

The George Washington University, School of Engineering & Applied Science **Washington, DC**
Bachelor of Science in Computer Science, Minor in Management and Leadership **May 2026**

- **Relevant Coursework:** Systems Programming, Usable Security and Privacy, AI and Society

The Hong Kong University of Science & Technology, School of Engineering **Hong Kong**
Study Abroad Program **Spring 2025**

LEADERSHIP & RESEARCH

SEAS SUPER Fellow, Lead Researcher **George Washington University**, May 2024 - Present

- Developed a low-cost, low-power edge computing distributed IoT system using Raspberry Pi and NVIDIA Jetson hardware, resulting in implementation of self-hosted machine learning capabilities for cost-effective data processing
- Designed streamlined IoT communication infrastructure and real-time analytics by deploying Docker containerization, MQTT communication protocol, Grafana visualization dashboards, and PostgreSQL database management on a distributed system
- Managed and led an interdisciplinary team of 5 graduate and undergraduate researchers, coordinating task delegation, facilitating weekly project meetings, and delivering comprehensive progress reports to Principal Investigator, resulting in ahead-of-schedule project milestones
- Awarded the SUPER Fellowship (2024, 2025) and the SURE Award (2025) to support research

Association for Computing Machinery, President, Treasurer **George Washington University**, April 2023 - Present

- Initiated and established regular hackathon programming, resulting in increased organization visibility within the Computer Science community and enhanced student engagement across multiple academic departments
- Restructured organizational leadership by creating two new executive board positions focused on student outreach and departmental relations, achieving diversified communication channels and expanded annual membership recruitment by 25%

EXPERIENCE

Greater Washington Partnership, Technology Intern **Washington, DC**, June 2025 - August 2025

- Executed a comprehensive website security and responsiveness audit and link mapping analysis across 50+ onsite and offsite connections, identifying 15+ critical vulnerabilities and performance bottlenecks to enhance user experience and site reliability
- Authored a detailed 8-page technical recommendation report focusing on data visualization enhancements and spearheaded strategic roadmap for website optimization and an enhanced stakeholder data accessibility
- Created responsive, low-code wireframe prototypes and facilitated cross-departmental meetings with IT, Marketing, and Executive teams, solidifying a long-awaited consensus on website refresh timeline and feature specification for Fall 2025

Collage, Contributor **Remote**, February 2025 - June 2025

- Developed backend data persistence architecture using SQL database integration, resulting in reliable storage and retrieval functionality for user activity data with 0 data loss incidents since its deployment
- Optimized frontend application performance by implementing Next.js pre-caching system based on proprietary activity importance ranking algorithm, achieving faster page load times and improved user experience
- Coordinated cross-functional development in hybrid remote/onsite team environment, delivering major project updates ahead of scheduled deadline while maintaining code quality standards

SKILLS & AWARDS

Skills: Java, Python, Javascript, SQL, Git, Unity, Linux, Kubernetes, Docker, PyTorch, MQTT

Awards: Milton Academy Head of School Award (2022), SUPER Fellowship (2024, 2025), SURE Award (2025)

Interests: Photography, Motorsport, Ultimate Frisbee