

# Spencer Richardson

LinkedIn: [www.linkedin.com/in/spencer-richardson25](https://www.linkedin.com/in/spencer-richardson25)  
Portfolio: [srich3.github.io/srich3portfolio](https://srich3.github.io/srich3portfolio)  
Email: [spencer.richardson25@gmail.com](mailto:spencer.richardson25@gmail.com)

Vancouver, WA  
(443) 878-3317

**Software Engineer** with 8 years of experience designing, implementing, and maintaining scalable software systems. Proven success in building robust back-end architectures, optimizing database performance, and delivering user-focused web applications. I am a collaborative team member with a strong attention to detail and a drive to continuously improve code quality and system performance.

## Education

**University of Maryland Baltimore County**  
*Bachelor's of Science in Information Systems*

**Baltimore, Maryland**  
2012 - 2016

## Professional Experience

**American Association for the Advancement of Science**  
*Software Engineer*

**Washington, DC**  
October 2018 – March 2025

- **System Architecture:** Designed and implemented distributed backend services in C# and Python supporting 5,000+ concurrent users with 99.9% uptime
- **Modernization Leadership:** Led migration of monolithic applications to cloud-native microservices architecture, achieving zero-downtime deployments and 60% improvement in system observability
- **Performance Optimization:** Built comprehensive telemetry pipelines and monitoring systems that identified critical bottlenecks, resulting in 45% reduction in average response times
- **Infrastructure Migration:** Developed automated migration tools enabling seamless partner transitions from legacy on-premise systems to modern cloud infrastructure, reducing migration time by 70%
- **Cross-functional Collaboration:** Partnered with product managers and stakeholders to translate business requirements into technical solutions, delivering 15+ major feature releases on schedule

**DDSystems**  
*Software Engineer*

**Washington, DC**  
March 2017 – October 2018

- **Security Assessment:** Conducted comprehensive security evaluations including vulnerability scanning, penetration testing, and network audits for 20+ enterprise clients across healthcare, construction, and manufacturing sectors
- **Infrastructure Design:** Architected compliant IT solutions meeting HIPAA, SOX, and industry-specific regulatory requirements while optimizing for performance and cost
- **Automation Development:** Created Python and PowerShell automation scripts for system monitoring, patch management, and maintenance, reducing manual operations by 80%
- **Cloud Migration:** Led infrastructure modernization projects migrating legacy Windows/Linux systems to cloud platforms, improving system reliability by 40% and reducing operational costs

## Technical Skills

**Languages:** C#, Python, JavaScript/TypeScript, Java, C++

**Cloud & Infrastructure:** Docker, Kubernetes, AWS/Azure, microservices architecture

**Databases & Storage:** SQL Server, PostgreSQL, NoSQL, cloud storage solutions

**DevOps & Tools:** CI/CD pipelines, Git, monitoring/observability tools, automation scripting

**Security:** Vulnerability assessment, penetration testing, compliance frameworks, incident response

**Development:** RESTful APIs, event-driven architecture, distributed systems, migration tools

## Leadership & Mentoring

Led architecture reviews and code quality initiatives across development teams

Mentored junior developers on best practices for distributed systems and cloud-native development