

Spencer Wilford

sawilford2006@gmail.com | <https://www.linkedin.com/in/spencerwilford/> | <https://github.com/SWilford>

Education

James Madison University

B.S. Computer Science | Honors College – GPA 3.48

Harrisonburg, VA

August 2024 – May 2028

- **Relevant Courses:** Discrete Structures I & II, Calculus II, Algorithms and Data Structures, Software Engineering, Computer Systems I, Computer Systems II (in progress), Applied Algorithms (in progress), Machine Learning (in progress)

Experience

Naval Surface Warfare Center Dahlgren Division

Software Engineer Intern

Dahlgren, VA

May 2026 – August 2026

- Engineered full-stack features for MADSS, an enterprise mission-assurance platform supporting 15,000+ DoW users in modeling mission dependencies, assessing operational impacts, and monitoring supporting resources.
- Diagnosed a complex database and application-layer performance issue affecting 10,000+ records and proposed changes that reduced data population time from ~4 minutes to ~15 seconds, a 93.75% improvement.
- Developed Angular components, modals, state-driven workflows, and feature-flagged functionality using TypeScript, NgRx, and RxJS while contributing to C#/.NET REST APIs and microservices.
- Resolved release-critical defects spanning frontend, backend, database, and multiple deployment environments; used SQL Server, Elasticsearch, Swagger, and Kibana to trace and validate system behavior.
- Delivered 11 development tickets across 8 weeks of active development on a 7-person SAFe Scrum team, participating in code reviews, sprint planning, release workflows, and PI planning.

National Geospatial Intelligence Agency

Software Engineer Intern

Springfield, VA

June 2023 – August 2023

- Operated in Agile sprints using Jira, collaborating with engineers and analysts to deliver secure software features.
- Integrated REST API metrics tracking across internal dashboards, improving visibility into user activity.
- Automated data ingestion with Python, reducing manual processing time by 80%.
- Built SQL pipelines to ingest, clean, and store structured datasets, ensuring reliable analytics each sprint.

Personal Technical Projects

JMU Men's Rugby Web Platform www.jmunensrugbyclub.com

React, Vite, Tailwind, Supabase, Cloudflare R2, Vercel

- Built and deployed full-stack production web platform including public pages and a protected admin dashboard.
- Designed a custom responsive UI system featuring animated components and dynamic data-driven cards.
- Engineered real time data flows from Supabase Postgres for matches, roster, media, sponsors and dynamic site content.
- Developed a secure content management system admin portal with Supabase Auth and role base access control.
- Built 5 full CRUD editors for schedule, roster/coaches, media, join page, sponsors/contact with full CMS capabilities.
- Implemented robust database security using Supabase RLS policies and custom admin authentication.
- Designed and deployed a serverless media pipeline using Cloudflare R2 + Supabase Edge Functions (Deno, S3 SDK) for signed uploads, object management and secure validation.

Thaw – AI Startup Matching Platform www.thaw.ai.app Hackathon Winner

React, Supabase, Gemini API, Vercel

- Developed full-stack AI-powered platform to match startups with investors and partners winning “Best First Time Hack” at Virginia’s largest hackathon (HooHacks 2026).
- Led backend development integrating Supabase for authentication, database and real time queries with secure access policies.
- Implemented AI-driven matching features using Gemini API including prompt engineering, model integration, structured response handling and agentic workflows.
- Architected and shipped production ready features under the tight hackathon time constraints in a 3-person team.

Leadership and Activities

Eagle Scout

- Earned Scouting’s highest rank after 8+ years of leadership and led teams of 10–75 during projects and expeditions.

James Madison University Men's Rugby Club

- Marketing Chair, May 2026 – May 2027; active player and responsible for the club’s digital presence and marketing.

Technical Skills

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

Frameworks & Libraries: Angular, React, .NET / ASP.NET Core, NgRx, RxJS

Databases & Tools: PostgreSQL, SQL Server, Elasticsearch, Git, GitHub, GitHub Actions, Linux, Swagger, Kibana

Methodologies: SAFe, Scrum (Jira, Confluence)