

JASON HOWARD WOHLGEMUTH

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KNOWLEDGE

Programming / Technology

- (*Experienced*) Rust, Python, PowerShell, C#, F#, ECMAScript (JavaScript), Node.js, HTML/XML/CSS, TypeScript, Docker, Apptainer
- (*Familiar*) WebAssembly, Julia, ReasonML, Clojure, ClojureScript, Kotlin, Elm, R, Kubernetes

CAREER TIMELINE

05/22 - Present, *Geospatial Data Scientist*

ORNL

- Lead development of ACORN, a Rust CLI metascience multitool that improves scientific practice through open, sustainable, and reproducible methods.
- Collaborate with senior R&D staff to deliver ML engineering and advanced analytics for national security applications — from concept through production.
- Prototype and validate new algorithms, evaluating effectiveness and scalability before full deployment.
- Contribute geospatial visualization expertise to cross-disciplinary teams spanning data science, ML, remote sensing, physics, and geography; recognized CesiumGS/cesium contributor.
- Build and publish containerized environments using Docker and Apptainer.
- Architect automated data ingestion and processing pipelines; define API and data contracts using DSLs such as TypeSpec, schemas (purple), and type-safe data models.
- Implement end-to-end MLOps workflows (similar to MLflow or DVC) for experiment tracking, model lifecycle management, and reproducible science.
- Manage the full scientific data lifecycle — ingestion to publication — using technology such as S3-compatible object storage and CKAN data catalogs.
- Enforce GitOps practices via GitHub Actions CI/CD with automated security scanning (Checkov, Hadolint, ShellCheck, etc.).

Visit my GitHub account for examples — including gold, a containerized dev environment, and pwsh-prelude, a cross-platform PowerShell standard library (42 stars)

03/20 - 04/22, *Operations Research Analyst / Data Scientist*

US_Stratcom

- Contributing author to the DoD ADEPT (AI Design Engineering for People and Technology) framework.
- Deputy team lead and ISSM for a multi-million dollar national security program; accountable for information system security and compliance.
- Served as AI/ML subject matter expert for the Advanced Warfare Solutions branch; advised senior leadership on emerging technologies and their operational implications.
- Developed mathematical models and software tools using scientific methods to evaluate and predict mission support capabilities across multiple programs.
- Applied operations research techniques — including genetic algorithms for problems with no closed-form solution — to improve mission effectiveness and efficiency.
- Owned security baseline — monitored releases, reviewed changelogs, applied version updates, filed security impact reports, and trained teammates on modern tooling.

11/15 - 03/20, *Principal Software Engineer*

BAESystemsInc

- Lead developer for a multi-million dollar application; designed and owned front-end architecture, build pipeline, and CI/CD workflows.
- Cross-organization consultant and daily mentor; served as the team's web technology authority on tooling, patterns, and best practices.
- Authored tomo-cli — a Node.js CLI with a React-based terminal UI that scaffolds production-ready projects with React, Webpack, Parcel, ESLint, Jest, and Cesium.js.
- Built full-stack JavaScript applications and REST APIs with Express and Node.js; integrated automated testing, code coverage, and CI/CD from day one.
- Applied Agile practices (Scrum, sprints, XP, retrospectives) to deliver iterative, sustainable software.
- Delivered numerous internal web technology presentations to upskill teams across the organization.

06/18 - 07/19, *Exercise Planner & Readiness Coordinator*

CJTFHOA (Mobilized to Djibouti in support of Operation Noble Eagle)

- Planned and led cross-functional teams executing large-scale joint exercises.
- Tracked and reported command readiness; ensured assessments were timely, accurate, and actionable for leadership.
- Designed and delivered command-wide training weekly; served as Knowledge Management subject matter expert.
- Achieved 100% compliance with Navy SAPR training requirements; maintained 100% branch readiness as Training Officer.

08/15 - 11/15, *Senior Software Developer*

Leidos

- Performed agile development using popular front-end technologies such as: Ampersand.js, Reveal.js, and Cesium.js

07/14 - 08/15, *Senior Software Developer*

BAESystemsInc

- Senior developer for multi-million dollar modern web application.
- Instrumental to implementing application infrastructure using MarionetteJS, HTML5, and Less.js

07/10 - 07/14, *Strategic Plans Officer / Security Manager*

USSTRATCOM Joint Functional Component Command, Global Strike

- Facilitated executive-level biweekly planning meetings; streamlined command communication and enabled senior leader decision-making.
- Operated mission-critical targeting and imagery tools daily: GSPA/ACME, JTT, DIEE, SPA, and IMEA.
- Qualified Collateral Damage Estimate (CDE) analyst.
- Provided technical counsel on *network analysis* and *operations research* to multiple USSTRATCOM groups; improved products and advanced the approval process.
- Modernized the division's web presence and knowledge management tools; designed a visual process grammar that directly contributed to the **data modernization** of the division and measurably improved productivity.

05/06 - 07/10, *Submarine Warfare Officer*

USS Louisiana (SSBN 743)

- Applied nuclear engineering training and submarine warfare qualifications daily — operating the engine room, standing watch, and leading the crew.
- Achieved zero deficiencies on the Operational Reactor Safeguard Exam by leading 100% verification of all damage control gear.
- Overhauled the command's classified material security program; drafted and executed a remediation plan that eliminated all security discrepancies at inspection.
- Selected from 10 officers as the submarine's inaugural LAN officer; wrote operating instructions and maintained 100% compliance through inspections.
- Supervised nuclear reactor and engine room operations at sea and in port; led teams through complex technical procedures and casualty situations.

EDUCATION

- **2021** Mini MBA, University of Nebraska at Omaha
- **2021** Strategic Leadership Fellow, USSTRATCOM (capstone paper)
- **2012** Master of Arts, Mathematics, University of Nebraska at Omaha
- **2006** Bachelor of Arts, Mathematics, University of San Diego
- **2006** Bachelor of Arts, Physics, University of San Diego

CERTIFICATIONS

- **2015** Certified Information Systems Security Professional (CISSP)
- **2015** Professional in Human Resources (PHR)

PUBLICATIONS & CITATIONS

See ORCID profile for more

- Small-World Properties of Facebook Group Networks
- Security and Privacy Management, Techniques, and Protocols (Advances in Information Security, Privacy, and Ethics) 1st Edition

PROFESSIONAL AWARDS

- **2025** Best workshop award (ORNL Data Expo 2025)
- **2024** ORNL Community Outreach Award
- **2022** Navy Commendation Medal
- **2017** Joint Service Achievement Medal
- **2014** Joint Service Commendation Medal
- **2011** Joint Service Achievement Medal
- **2010** Navy and Marine Corps Achievement

OTHER ACCOMPLISHMENTS

- **2026 - Present** Selected to lead Metadata and Technology working group for the inaugural US RAiD pilot
- **2025 - Present** Inaugural steering committee member, Center for Open Science
- **2019** Completed OSCP Penetration Testing with Kali Linux training
- **2014 - Present** Navy Selected Ready Reserve (Commander, O-5)
- Holds Top Secret / SCI clearance based on Single Scope Background Investigation