# KNOWLEDGE

## Programming

* *(Experienced)* ECMAScript (JavaScript), Node.js, HTML/XML/CSS
* *(Familiar)* F# ReasonML Rust, WebAssembly (from Rust), Kotlin, Clojure, ClojureScript, Elm
* I used Python for my Masters thesis - [published in the journal, Complex Systems](https://www.complex-systems.com/abstracts/v23_i03_a01/)

I build web apps, desktop apps, servers, APIs, libraries, and CLI tools

## Tools, Libraries, and Frameworks

* React.js CesiumJS, Backbone.js, MarionetteJS, jQuery, RequireJS (*AMD* )
* Web Components ([#usetheplatform](https://twitter.com/hashtag/usetheplatform?src=hash)), Lodash.js, Redux.js, RxJS
* Babel, Webpack, Rollup.js, Parcel.js, Browserify, [@pika/web](https://www.pika.dev/blog/pika-web-a-future-without-webpack/)
* code quality (ESLint, flow, etc…)
* unit/integration/fuzz/acceptance testing (jest, AVA, mocha, jasmine, etc…)

See my [GitHub account](https://github.com/jhwohlgemuth) for examples

## Database Technologies and DevOps

* *(Database Technologies)* MongoDB, redis, CouchDB, MySQL
* *(Continuous Integration)* Jenkins, Travis, Codeship
* *(Development and Deployment)* Git, nvm, npm, grunt, gulp, now, surge, heroku

I follow track of current trends and developments…it is [one of my hobbies](https://twitter.com/jhwohlgemuth) :)

## Software

* Adobe XD, Adobe Illustrator (CS6), Adobe Photoshop (CS6)
* Docker, Vagrant, Packer, VMWare, VirtualBox, Linux, RHEL, WLS
* Almost any front-end IDE/editor (current favorite is VS Code)
* Atlassian JIRA, Stash (Bitbucket Server), Confluence

My favorite oh-my-zsh theme is “agnoster”

## Security

* MITRE CVE and CWE
* So Now You Know (snyk)
* OpenSCAP

I always use [npm audit as a prestart task for Node.js servers](https://github.com/jhwohlgemuth/tomo-cli/blob/master/src/commands/create-server/index.js#L82)

I made an [ESLint config mapped to MITRE CWEs](https://github.com/omahajs/eslint-config-omaha-prime-grade/blob/master/RULES_FOR_SECURITY.md)

# SKILLS & EXPERIENCE

## Mathematics / Operations Research / Network Science

* During my Masters studies, I studied Operations Research for over a year including the basics and a Python program to leverage genetic algorithms to solve a problem with no closed form solution.
* My Masters thesis was an original topic of my own conception and leveraged network analysis to analyze small world networks created from Facebook data. See [publications section](#publications-citations).

## Design / Development / Security

* As a BAE Systems principal engineer, consulted on multiple projects across BAE Systems and mentored developers on a daily basis
* Created a [CLI tool to help create sustainable solutions with web technologies](https://github.com/jhwohlgemuth/tomo-cli). I maintain this project and leverage it to codify and share my knowledge in order to facilitate continued learning for me and others.
* Maintain security baseline by monitoring releases, reviewing changelogs, integrating version updates, submitting security impact analyses, and training co-workers on modern trends and technologies.

## Training / Mentorship

* As a principal engineer at BAE Systems, developed and delivered [numerous presentations on web technology](https://github.com/jhwohlgemuth?utf8=%E2%9C%93&tab=repositories&q=slides&type=source&language=)
* As a Command Training Team officer liaison, guided the planning and implementation of new training practices and procedures that included achieving 100% compliance with new Navy SAPR training guidance.
* Maintained 100% readiness as the branch Training Officer ensuring that personnel were always ready to meet mission objectives.

Naturally, I use web technology to create my presentations - [Reveal.js](https://revealjs.com/#/) and [Spectacle.js](https://formidable.com/open-source/spectacle/)

## Engineering / General Management

* As a division officer on a submarine, supervised the daily operations of a nuclear reactor and engine room at sea and in port, maintaining electrical power to vital systems throughout the submarine.
* Led teams through complex technical evolutions, during maintenance and casualty situations, maximizing efficiency while maintaining a safe environment.

# CAREER TIMELINE

## 03/20 - Present, ***Operations Research Analyst***

[*@US\_Stratcom*](https://twitter.com/US_Stratcom)

* Utilize scientific inquiry in the independent development of mathematical models and computer programs to evaluate and predict the ability to support assigned projects, studies, or problems.

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

[*@BAESystemsInc*](https://twitter.com/BAESystemsInc)

* Lead developer focused on quality and sustainability
* Developed and implemented front-end architecture and workflow for multi-million dollar application
* Served as web technology expert, experienced mentor, and valuable trainer

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

[*@CJTFHOA*](https://twitter.com/CJTFHOA)

* Conduct planning and lead cross-functional teams to execute large scale exercises
* Coordinate command readiness and ensure assessments are timely and accurate
* Develop and deliver command wide training on a weekly basis
* Knowledge Management subject matter expert

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

[*@Leidos*](https://twitter.com/LeidosInc)

* 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*](https://twitter.com/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*

* Streamlined communication up chain of command and facilitated executive-level, biweekly planning meetings; improved planning process and enabled collaboration and senior leader strategic decision making.
* Worked with and around multiple applications on a regular basis such as Global Strike Planning Aid (GSPA, now named ACME), Joint Targetting Toolbox (JTT), Digital Imagery Exploitation Engine (DIEE), SPA, and IMEA
* Qualified as a Collateral Damage Estimate (CDE) analyst
* Consulted with multiple groups in US Strategic Command; provided technical counsel on projects involving ***network analysis*** and ***operations research***; improved products and furthered approval/development process.
* Modernized websites, maintained collaboration tools, created new tools for mission accomplishment, and maintained overall situational picture as division knowledge manager; improved productivity and efficiency.

## 05/06 – 07/10, ***Submarine Warfare Officer***

*USS Louisiana (SSBN 743)*

* Led team to verify 100% of damage control gear prior to sub’s major Operational Reactor Safeguard Exam; ensured zero deficiencies and sub’s ability to combat any casualty, real or simulated, during patrols.
* Led efforts to improve tracking and control of top secret material; drafted and executed aggressive plan that successfully fixed sub’s wayward security program; led to no security-related discrepancies during inspection.
* Selected out of 10 officers as sub’s inaugural LAN officer; essential in writing operating instructions; maintained LAN with 100% compliance and no major discrepancies during inspections.

# PROFESSIONAL AWARDS

* **2017** Joint Service Achievement Medal
* **2014** Joint Service Commendation Medal
* **2011** Joint Service Achievement Medal
* **2010** Navy and Marine Corps Achievement

# EDUCATION

* **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

* **????** Offensive Security Certified Professional (OSCP)
* **2015** Certified Information Systems Security Professional (CISSP)
* **2015** Professional in Human Resources (PHR)

# PUBLICATIONS & CITATIONS

* [Small-World Properties of Facebook Group Networks](http://wpmedia.wolfram.com/uploads/sites/13/2018/02/23-3-1.pdf)
* [Security and Privacy Management, Techniques, and Protocols (Advances in Information Security, Privacy, and Ethics) 1st Edition](https://smile.amazon.com/gp/product/1522555838/ref=ppx_yo_dt_b_asin_title_o02_s00?ie=UTF8&psc=1)

# OTHER

* Cleared for Top Secret information and granted access to Sensitive Compartmented Information based on a Single Scope Background Investigation.
* 2014 - Present Navy Selected Ready Reserve member (LCDR, O-4)
* 2011 - 2013 Tutored local high school students in Geometry and Trigonometry
* 2012 - 2013 Tutored online with tutor.com in Calculus and Algebra