

# James Kavanaugh

📍 Seattle, WA

📞 253-209-9718

✉ jkav@northslopesoftware.com

🌐 linkedin.com/in/jkav3

## Software Engineer

*Skilled bilingual software engineer with 20 years experience leading diverse high-performance teams.*

## Projects

- **Marine construction permitting system:** Client relationship management (CRM) application implemented with Typescript, React, AWS, websockets, and MongoDB to manage multi-year permitting processes.
- **Web socket framework:** Typescript and Node.js web socket framework with message schema validation to enable real-time synchronization of web applications and maintain data consistency.
- **Encrypted synthetic data research:** Python and C++ based research using homomorphic encryption and differential privacy to maintain privacy of sensitive datasets while generating synthetic data.
- **Computer vision application:** C++, OpenCV and Tensorflow models to monitor RTSP camera streams, with macOS and tvOS client applications to view home security camera and insights.

## Experience

<b>President and CEO (Owner)</b>	North Slope Software	2022-2024
<ul style="list-style-type: none"><li>• Responsible for product development, software engineering, user experience design, security, and DevOps.</li><li>• Designed and implemented a custom CRM application for a local marine construction company, which increased efficiency and reduced errors for the client saving \$50,000 over the product lifetime.</li><li>• Developed a websocket framework for the browser and Node.js to synchronize web applications with the backend data store to facilitate real-time collaboration between application users.</li><li>• Deployed web applications to AWS Amplify, EC2, S3, Route53, and other services to decrease fixed costs and increase reliability and scalability.</li><li>• Conducted business development with overseas software developers in India and Brazil to extend North Slope Software's capabilities and cut future development costs in half.</li><li>• Initiated customer and product development for a delegated awareness computer vision service for IP cameras using TensorFlow, AWS, Python, C++, Next.js, and DynamoDB.</li></ul>		
<b>Master Sergeant, Green Beret, U.S. Army</b>	1 <sup>st</sup> Special Forces Group (Airborne)	2004-2024
<b>Indo-Pacific Regional Program Manager (18Z)</b>	Washington and overseas	2020-2024
<ul style="list-style-type: none"><li>• Led a diverse multidisciplinary staff to manage joint special operations teams in seven Asian countries to counter regional adversaries and bolster American partnerships.</li><li>• Responsible for all advanced special operations in the Indo-Pacific theater, including 182 missions that increased achievement of military objectives by 200%.</li><li>• Mentored and developed senior special operations leaders and technicians to achieve strategic effects and develop their careers.</li><li>• Translated high-level, ambiguous strategic guidance into achievable tactical tasks and supervised executing teams to ensure operations led to strategic results.</li></ul>		
<b>Special Forces Team Sergeant (18Z)</b>	Washington and overseas	2018-2020
<ul style="list-style-type: none"><li>• Responsible for training, mentorship, and professional development of a high-performance and specialized Special Forces detachment.</li><li>• Acted as liaison between Special Operations Command (SOCOM), U.S. Government agencies, and Korean partners for combined operations to mitigate threats from regional adversaries.</li></ul>		
<b>Special Forces Intelligence Sergeant (18F)</b>	Washington and overseas	2012-2018
<ul style="list-style-type: none"><li>• Responsible for analysis and planning to drive effective operations for a Special Forces detachment with limited guidance and resources in challenging environments.</li><li>• Conducted two Chinese language immersion and cultural exchange programs in Shenyang, China at Shenyang</li></ul>		

University and Liaoning University, gaining a working proficiency in Mandarin Chinese.

- Built trust and rapport with Iraqi, Philippine, Afghan, Korean, and Thai military partners to support combined operations on mutual goals.

**Special Forces Medical Sergeant (18D)** Washington and overseas 2007-2011

- Conducted 150 combat patrols as the first responder for a Special Forces detachment and as a trainer and advisor for an Iraqi partner force to decrease deadly attacks, secure Tikrit, Iraq, and protect coalition forces.
- Sole medical provider running day-to-day operations for a clinic on the remote Jolo Island in the Philippines, providing medical and dental services by pulling teeth, treating infections, and more.

**Special Forces Recruit and Trainee (18X)** Washington and overseas 2004-2007

Skills

Team Building	Machine Learning	Strategic Planning	Communication	Agile Development
C / C++	Python	Javascript	Typescript	Node.js
React / Next.js	AWS	Postgres (SQL)	MongoDB (NoSQL)	Git

Education

M.S. Computer Science and Systems	University of Washington	December 2024
B.S. Software Engineering	Arizona State University	2022
Intensive Second Year Chinese Program	University of Washington	2013