James Kavanaugh

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J 253-209-9718

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.
- Request for quote application: Cloud-native AWS application written in Typescript, React, Next.js that uses AWS Amplify, DynamoDB to streamline requesting and comparing vendor quotes.
- Space Time: Native iOS and watchOS application with AWS Amplify and GraphQL backend to help users visualize time linearly instead of as a cycle to create urgency. Memento mori.

Experience

President and CEO (Owner)

North Slope Software

2022-2024

- Bootstrapped North Slope Software by providing compelling custom business applications to clients.
- Responsible for business development, user experience design, software development, and DevOps.

U.S. Army Special Forces "Green Berets"

1st Special Forces Group (Airborne)

2004-2024

Indo-Pacific Regional Program Manager (18Z)

Washington and overseas

2020-2024

- Led a diverse multifunctional staff to manage joint special operations teams in seven Asian countries.
- Mentored and developed leaders and technicians on high-performing teams to achieve strategic objectives.
- Responsible for written communication and briefings to synchronize operations with senior leaders' intent.

Operations Manager (18Z)

B.S. Software Engineering

Washington and overseas

2018-2020

- Managed a high-performance, multifunctional, and highly specialized special forces detachment.
- Responsible for training, mentorship, and professional development for a Special Forces operational detachment.

Assistant Operations Manager (18F)

Intensive Second Year Chinese Program

Washington and overseas

2012-2018

2022

2013

- Responsible for data mining, analysis, and targeting to plan tactical operations for a Special Forces detachment.
- Worked cooperatively with Iraqi, Philippine, Afghani, Korean, and Thai military partners on mutual goals.
- Gained working proficiency in Mandarin Chinese during two language exchange trips to Shenyang, China.

M.S. Computer Science and Systems		University of Washington		December 2024
Education				
React / Next.js	AWS	Postgres (SQL)	MongoDB (NoSQL)	Git
C / C++	Python	Javascript	Typescript	Node.js
Project Management	Communication	Agile Development	Strategic Planning	Machine Learning

Arizona State University

University of Washington