

# Brent Michalski

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## Senior iOS Engineer

20+ Years of Software Development Expertise, Specializing in Creating Secure and Efficient Apps for Critical Operations, including the GEOINT App Store for the U.S. Intelligence Community • Proven History of Consistently Exceeding User Expectations through Innovative Features and Robust Security Measures • 15+ Years of Expertise in iOS App Development with Strong Command of Objective-C, Swift, and SwiftUI • Possess a Deep Understanding of UI/UX Interaction Paradigms, Animations, Gestures, Design Patterns, and iOS Quality Craftsmanship • Extensive Experience with iOS Frameworks (UIKit, Core Animation, Core Data, etc.) • Skilled in Rapidly Building Minimum Viable Products without Over-engineering.

### WORK EXPERIENCE

#### **Vega Federal LLC** • Remote • 2024 - 2025

##### Senior Software Engineer (Technical Lead) • Contractor

- Led complete modernization of open-source MAGE iOS app (geospatial platform used by military/first responders) — rebuilt authentication, sign-up, and startup flows from Objective-C to SwiftUI with OAuth/SSO/biometrics support.
- Influenced Architectural Decisions: Migrated 75% legacy Objective-C to modern Swift/SwiftUI, implementing caching with offline tile storage and shared MapKit/Core Location components, while setting design patterns and coding standards to boost developer efficiency.
- Eliminated three recurring field-operation crashes caused by server sync race conditions, achieving zero crashes post-launch in disconnected/low-bandwidth environments.
- Collaborated cross-functionally with product and engineering teams to enhance real-time tracking/geotagged features, championing TDD for critical paths and contributing to public GitHub repo to support scalable iOS experiences for government/emergency users.

#### **Daugherty Business Solutions / Edward Jones** • Remote • 2020 - 2024

##### Senior iOS Consultant (Technical Lead) • Contractor

- **Pioneered OpenAPI Integration:** First iOS Developer to implement OpenAPI for API calls, enabling automatic generation of networking code through the OpenAPI Swift Generator, setting the foundation for future automatic code generation for all networking components.
- **Developed Authentication Middleware:** Created middleware using Apple's OpenAPI to automate token and cookie inclusion in all network calls, eliminating manual setup for new endpoints and streamlining network code generation.
- **Resolved Critical App Issues:** Identified and fixed rare but critical app crashes and performance issues, enhancing the UX.
- **Enhanced Accessibility Features:** Implemented Voice Over technologies for banking views, significantly improving app usability for users with severe visual impairments.

#### **Boeing** • St. Louis, MO • 2019 - 2020

##### Senior Embedded Software Engineer • Full-time

- Delivered Linux builds achieving 94% SCAP compliance (exceeding DoD 90% requirement).

- Led design of secure deployment platform for military aircraft software in classified environments, owning architecture and best practices to ensure high-performance, reliable builds.
- Influenced architectural decisions and coding standards for CI/CD pipelines, ensuring reliable performance in high-stakes environments.

## PAR Government • Remote • 2017 - 2018

### Senior iOS Software Engineer • Full-time

- Engineered real-time live video feed feature for iTAK app (mission-critical tool for military/first responders), integrating geo-coded drone data for seamless streaming and enhanced situational awareness—improved decision-making in operational scenarios.
- Spearheaded integration of advanced ESRI mapping features using latest iOS tech, reducing app latency by 33% and boosting operational efficiency by 14% through architectural enhancements.
- Drove adoption of new iOS frameworks; mentored team on agile methodologies, increasing productivity 21%; conducted code reviews and promoted high-quality standards for reliability.

## Mastercard • 2017 - 2017

### Sr. Mobile Software Engineer • Contractor

- **Automated Unit & UI Testing:** Designed and implemented automated unit and UI tests, enhancing code reliability and reducing manual testing time by over 40%, showcasing a strong commitment to quality and efficiency.
- **Hackathon Winner:** Played a pivotal role in winning Mastercard's "Take Initiative 2017" hackathon, demonstrating exceptional coding and teamwork skills in a competitive environment.
- **Bug Fixing:** Identified and resolved multiple bugs in released apps, improving their performance and user experience.

## NJVC, LLC. • 2010 - 2017

### Sr. Software Engineer • Full-time

- **Spearheaded Development of the GEOINT App Store:** Led the creation of a pioneering platform that redefined secure digital ecosystems for the U.S. Intelligence Community, modeled after Apple's App Store and featuring advanced functionalities such as subscription management, app launch tracking, and a robust "app kill switch" for immediate access termination.
- **Catered to Multiple Agencies:** GEOINT App Store served the National Geospatial Intelligence Agency, DoD, first responders, and the Intelligence Community offering 130+ applications across various classification levels.
- **Selected for High-Priority Role:** Chosen for a subcontracted position with Microsoft, performing an extensive iOS application code and security audit for a leading financial firm merger due to mastery of mobile app security within the iOS development realm.

## Monsanto (acquired by Bayer in 2018) • 2004 - 2009

### Sr. Developer • Full-time

- **Enhanced Quality Control Tools:** Optimized internal quality control tools, improving data integrity and efficiency by 24%.
- **Engineered Critical Genetic Database:** Collaborated with end-users to analyze and prioritize software requirements, enabling the creation of a multi-terabyte database of critical genetic data for research and development.
- **Standardized Perl Practices:** Led companywide adoption of Perl standards, enhancing coding efficiency and maintainability.

## EDUCATION

### **Masters Degree in Adult Education and Distance Learning**

University Of Phoenix • 2004 - 2006

### **Bachelors Degree in Computer Information Systems**

National American University • 1994 - 1997

## PUBLICATIONS

### **Perl Database Programming** • 2002

Wiley

### **Writing CGI Applications with Perl** • 2001

Addison-Wesley Professional

## Medium.com

Multiple Published Articles:

- Solving SwiftData Preview Crashes (Jun. 2024)
- Xcode Integration with GitHub: A Step-by-Step Guide (May 2024)
- Lost in Privacy: Apple's Maze of Madness for Devs (May 2024)
- Failing Unit Tests: The Developer's Key to Confidence and Quality (Apr. 2024)
- Swift State for People with ADHD (Apr. 2024)

## SKILLS

Agile, Architectural Decision-Making, async/await, ChatGPT, CI/CD, Claude AI, Code Reviews, Combine, Core Data, Core Location, Cross-Functional Collaboration, Cursor, Github Copilot, iOS, Live Video Streaming, MapKit, Mentoring, OAuth/SSO, SQLite, Swift, Swift Concurrency, SwiftData, SwiftUI, TDD, Technical Documentation, XCTest, XCUITest