

Alf Orion Watt

San Francisco, CA

alf@istumbler.net — ↑ [Latest Version](#)

[Gitlab](#) | [GitHub](#) | [Linkedin](#) | [Stack Overflow](#) | [Medium](#) | [@istumbler](#) | Voicemail: [\(415\) 449-0905](tel:(415)449-0905)

Hands-on leader with experience managing every stage of the software development life cycle. Architected, designed, developed, and launched multiple apps for iOS and macOS. More than a decade of expertise in Wireless Networking and User Experience.

Engineering Manager — Mobile Telemetry

Mapbox, San Francisco

April 2019 – Present

Mapbox SDKs collect anonymous data about the map and device location to continuously update and improve your maps.

The Mapbox Mobile Telemetry team is responsible for development and operational excellence of the Mobile Events SDKs used in over [45,000 mobile apps for Android and iOS](#) to collect more than 300 Million miles of anonymized, aggregated road and telemetry data every day. These Open Source frameworks for collecting anonymous [telemetry](#) to help improve Mapbox's data products while carefully preserving user privacy.

Led, recruited, hired, and grew the Mobile Telemetry team from two engineers to a total of six iOS and Android engineers to sustain and improve existing products and quality process.

Researched, designed, specified, and implemented an error containment and reporting system for iOS SDK to enable all Mapbox Mobile SDKs to send back automated live service error reports along with detailed analytics, allowing the team to improve the reliability and quality of all products.

Designed and managed implementation of a flexible configuration service, allowing all Mapbox SDKs to run experiments, manage rollout of new features, and enables a new "High Definition" collection of much higher resolution sensor data.

Documented and instituted an issue management process modeled on my experience working with Apple's development process. With goal of improving quality, driving timely resolution of issues and improving team velocity. This allowed the team to track new features and changes from proposal through implementation, integration and verification steps in preparation for future ISO 9001 process compliance.

Senior Software Engineering and Leadership Consultant

iStumbler Labs, San Francisco

April 2015 – April 2019

iStumbler Labs designs, produces, and publishes software, offering complete product design and development services plus a suite of our own products.

Launched [iStumbler](#) as a commercial product, with an integrated store and more than 100 other new features and enhancements.

Made sharing a Wi-Fi network super easy with [SmartJoin.us](#), and the [SmartJoin](#) app for iOS and tvOS.

Published [localrouter.net](#) which find your local Wi-Fi routers web interface, as well as local web servers in just seconds.

Implemented the [Voyance Client Agent](#) for Nyansa Inc. which adds the client view of network performance including configuration details and multiple performance counters.

Brought Oscium's [WiPry 5x W-Fi Spectrum Analyzer](#) to macOS with iStumbler Release 102.

Provided iOS Connectivity Engineering at [Automatic Labs](#) to support a custom in vehicle OBD-II/CAN adapter.

Helped Eva Automation (now [Bowers & Wilkins](#)) define their in home Wi-Fi media streaming strategy.

Interim CTO for HelloBit, a fin-tech company focused on providing peer-to-peer financial services, managed online infrastructure along with development and design of the HelloBit app for Android.

Published several [OpenSource frameworks](#) and tools including: [KitBridge](#), [LiveBundle](#), [Soup](#), and [pdf2png](#).

Founder, Masu Networks

[Masu](#), San Francisco

April 2014 – April 2016

Masu Networks is a design for a crypto-currency driven Wi-Fi Sharing and Contactless Cash solution for retailers.

Designed a retail crypto currency exchange system to enable consumers to discover, experiment and learn by making low cost, high-value transactions for Wi-Fi access and easily adopt digital currencies into their everyday shopping habits.

Iteratively researched, prototyped, tested, refined and reevaluated dozens of frameworks for providing low or zero cost ubiquitous Wi-Fi access by creating a sustainable business model based on requirements.

Pitched [Masu](#) as a solution to providing free universal Wi-Fi and IoT device connectivity, and low cost high-performance Internet access using a crypto-currency based sharing economy. Presented slides and answered questions at public investor presentations and private venture offices.

Manager, Mobile Applications

[Ruckus Wireless Inc.](#), Sunnyvale

September 2012 – April 2014

Ruckus Wireless builds high performance Wi-Fi Access Points and management tools for high capacity deployments

Grew the Ruckus Mobile Applications suite from a set of small demonstration apps into a cross platform enterprise wireless management toolset.

Evaluated contract service providers, negotiated contracts for both individual contributors and multi-year development in excess of \$1 million annual value. Recruited, managed and developed technical staff to design and specify work for offshore team.

Delivered [ZoneDirector Remote Control](#), an industry leading Mobile app for monitoring & managing the Ruckus ZoneDirector Controller, on a bi-annual schedule alongside controller updates.

Designed and managed implementation of the [Ruckus SmartWay](#) Bonjour Gateway, which is integrated into the ZoneDirector Controller.

Worked with newly acquired company to implement their Indoor Location calibration system in a mobile app: [SPoT](#) which allows installers to quickly and easily setup the system for customers.

Managed development of a rapid Wi-Fi provisioning tool, [Ruckus SWIPE](#) which integrates into the Ruckus Carrier and Cloud management systems.

Wi-Fi Software Engineer

[Apple Inc.](#), Cupertino

April 2007 – July 2012

Apple Inc. revolutionized networking with the iBook and AirPort Base Station in 1999

Responsible for Wi-Fi User Experience on OS X from Snow Leopard (10.6) through Mountain Lion (10.8). Proposed and prototyped multiple UI updates, including flexible sorting and grouping of networks to make it easier to choose the correct one.

Dug deep into the user experience and quality of Wi-Fi and networking components with Apple Care to identify opportunities to improve the connectivity, performance, and reliability of Apple's wireless networking products.

Worked closely with Wireless Hardware Engineering to improve the test fixtures used to verify wireless systems in the factory. Designed and implemented an over the air handshake between DUT and Test Server to improve throughput and increase manufacturing efficiency while allowing for thorough testing of new Apple hardware.

Radar Component Creator and Component Owner for multiple internal frameworks including: Wi-Fi Diagnostics, Network Utility & several internal components and frameworks.

Researched Ultra wide-band technology, investigating next generation solutions for providing optimal networking performance while maintain power and thermal budgets.

Lead Mac Engineer

[imeem.com](#), San Francisco

October 2006 – March 2007

imeem.com was a VC backed startup that launched an early social network app and site focused on media sharing

Proposed, designed, and developed a desktop media player providing a full screen, remote driven, presentation of imeem audio, video, and photos content selected for the user.

Led a small team to maintain a hybrid Cocoa/C# messaging and social networking client, demonstrated the app at MacWorld.

Skills [years]

Wi-Fi [10+], Bluetooth [10+], & RF Measurement[10+]; UWB [8]; Bonjour Service Discovery [10+]; TCP/IP & Networking [10+]; Blockchain, Distributed Ledgers, and Digital Assets [5]; OS X, BSD, Linux & c.[10+]; User Interface & Usability Design [10+]; Object Oriented Analysis & Design [10+]; Threading, Concurrency, and Performance & Tuning [10+]; XML, CSS, HTML & HTTP [10+]; Tech Writing, Specifications & Design Patterns [10+]; Swift, Objective-C & Cocoa [10+]; C, C++, Java [10+]; Perl, Python, JavaScript, Shell etc. [10+]; Embedded Development [8]; Team building, and leadership [8]