

Michael Rockhold

Software engineer based in Seattle

I'm a senior software developer with a wide range of experience and interests. I have a high degree of skill and experience in native mobile application development as well as in the design and development of backend microservices suitable for supporting those mobile apps. I am motivated by opportunities to learn new things and to share those learnings with colleagues and collaborators.

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Skills

Experienced in every stage of the design and implementation of sophisticated software systems:

- Requirements gathering
- Sprint planning
- Design and code reviewing: reviews included other engineers and were held to ensure a high level of software quality and to share knowledge with team members
- Planning, creating, and executing automated test cases and UI automation
- Participating in customer support activities
- Adept in software engineering practices using such tools and methodologies as - Agile Software Development - Test Driven Development - Continuous Integration / Continuous Deployment
 - Source Code Management via git and GitHub/GitLab/BitBucket - Swift, Objective-C, Go, Python, Java, JavaScript, Terraform, and others
- A history of supporting the technical skills growth of other team

members through empathetic mentoring, code review, and brown-bag presentations;

- A strong independent contributor, I am highly motivated, enthusiastic, and able to work under minimal guidance. I am also a great team member, with excellent skills in communication across teams and across disciplines via email, Slack, etc. Even face-to-face!
- Recruiter, involved in candidate assessment, interviewing, and leveling

Engineering Experience

Software Engineer @ [Sinclair Digital](#) (November 2019 - Present) (Seattle WA)

Sinclair Digital is the software division of Sinclair Broadcasting Group. Across a couple of re-organizations, I have had the chance to work on a remarkable variety of projects.

- **Video Service Engineering team:**
 - Designed, developed and deployed middleware to support streaming video services' customer sign-up and subscription service;
 - Designed and developed a system that automates the connection of live station news feeds to Facebook Live and other social media streaming services.
 - Designed, developed, and put into service a cloud-based search engine for KOMO TV's archive of daily run-down sheets going back decades;
 - Coded in primarily in Java, JavaScript, and Terraform to build and deploy web APIs using Spring Boot and other frameworks;
 - Used AWS services including ECS, API Gateway, Route 53, S3, Lambda, DynamoDB, CloudFormation, Simple Notification Service;
 - Wrote Terraform infrastructure automation scripts to deploy to AWS via GitLab CI/CD system
 - Debugged my APIs across service boundaries;
 - Acted as a leader and subject matter expert for APIs in my area of

responsibility;

- Collaborated with partner and user teams across the company, consulting with developers on other teams to share code, establish interfaces, distribute labor
- Wrote clear, concise, and testable code;
- Provided valuable unit and integration tests;
- Contributed meaningful feedback in peer code reviews;
- Mentored junior developers;
- Interviewed developer candidates for recruitment to our team or to others.

- **In the (now defunct) Innovation Lab:**

- Proposed projects;
- Presented plans, progress, and results on a regular basis to Steering Committee, the C-suite audience that commissions and evaluates our work;
- Authored development and test plans;
- Wrote clear, concise, and testable code.
- Coded in primarily in Go, GraphQL, and Python, some Javascript with React & React Native;
- Developed unit and integration tests for new code;
- Used cloud tools like ElasticSearch, AWS Lambda, AWS CloudFormation, AWS S3, AWS SNS, etc.;
- Wrote Terraform scripts to deploy to AWS via GitHub and GitLab CI/CD systems;
- Designed and developed a simple middleware to be a single coherent API for our clients to use exclusively, which coordinates and orchestrates access to a number of different services, both internal and external to Sinclair;
- Used AWS Lambda, DynamoDB, CloudFormation, S3, Simple Notification Service to build the micro services;
- Wrote Terraform and Serverless automation scripts to deploy to AWS

via GitLab CI/CD system

- Developed custom middleware to support web and React Native clients for a prototype of a new Sinclair news property;

Sr. Software Engineer @ [Hestan Smart Cooking, Inc.](#) (July 2017 - April 2019) Seattle, WA

Hestan makes advanced microprocessor-equipped cookware that enables the user to cook very precisely with an iOS or Android app and a web service to guide users through meal preparation tasks.

- Designed, implemented features
- Reviewed code in ObjC, Swift, Java for iOS and Android apps and web services deployed on AWS
- Developed manual and automated test processes
- Interviewed and assessed candidates for recruitment
- **Technologies used:** C/C++, Objective C, Swift, Java. iOS, Android. Xcode, Android Studio.

Software Engineer III @ [Nordstrom, Inc.](#) (September 2013 - May 2017) Seattle, WA

I played a number of roles there over time. As a member of the "Mobile API" team, I coded C# and Go micro-services which we deployed on AWS and on on-premises Windows IIS.

As a senior iOS application developer, I performed application development in an agile, TDD, environment, where paired programming was the norm.

Software Development Engineer @ [Ascentium, Inc.](#) (July 2012 - August 2013) Kirkland, WA

Ascentium (now called 'Smith') is a IT services and consulting company that employed me to develop iOS apps.

- **Technologies used:** Objective C. iOS. Xcode. Webkit and AV Foundation frameworks.

Principal @ Rockhold Company, LLC (*February 2009 - September 2013*)
Seattle, WA

Owner of a one-person software development business doing private development of applications for the Apple iPhone, iPod Touch, and iPad, as well as providing software development consulting services to customers developing similar products.

Apps in the iOS App Store (since removed from the iTunes App Store as customer interest did not justify the effort of continued maintenance):

- TransitScope, an iOS app for visually tracking the progress of King County Metro Transit buses along their routes through the Seattle area
- Aktualala Loko, an app for communicating the user's present geographic location to their friends via social networking systems
- RegEx Live!, a tool for exploring how to construct regular expressions
- **Technologies used:** C/C++, Objective C, iOS, macOS, SOAP, WSDL, MapKit, Open Street Map static image API, Python, Apache web server.

Software Design Engineer II @ [Microsoft Corporation](#) (*April 1996 - January 2009*) *Redmond, WA*

Several roles in different orgs

- As an individual contributor to .NET Micro Framework platform team:
 - participated in the design and development of a portable implementation of the Microsoft Common Language Runtime for extremely resource-constrained embedded systems, and Windows-hosted tools for developing, debugging, and deploying software to them;
 - implemented support for multibyte characters for string data in the runtime

- developed a Visual Studio plugin to support targeting .Net Micro Framework devices and emulators from the Visual Studio IDE
- As member of the Windows CE OS & Mobile Engineering Services teams: - Produced a number of internal test tools and libraries - Ported "Magellan" NT code coverage tools to CE OS for comprehensive collection of coverage data over time - Developed the practices for CE OS automated and manual test labs to use for collecting coverage data in automated and ad-hoc testing
- **Technologies used:** Microsoft C/C++, MSBUILD, Visual Studio, GNU C/C++, Python.

Developer @ [Attachmate Corporation](#) (October 1994 - April 1996) Bellevue, WA

Attachmate Corporation is a 1982-founded software company which focused on secure terminal emulation, legacy integration, and managed file transfer software.

- Developed FTP client for *Extra!*, an integrated mainframe connectivity tool for Mac OS (classic).
- Developed automated build system for another similar product
- Maintenance programming (C/C++) for several products
- **Technologies used:** Object Pascal, C/C++, Mac OS System 7, Linux.

QA Lead @ [Symantec Corporation](#) (1991 - 1994) Bedford, MA

Symantec Corporation was the corporate parent of THINK Technologies, maker of Lightspeed Pascal, THINK C, and other programming tools.

- Developed and carried out test plans THINK C++, THINK Pascal, and the THINK Class Library (TCL)
- lead a small team of 1 to 3 direct reports
- Maintained Think Class Library in C++ and Object Pascal.
- Adapted Apple's MacApp C++ application framework to use THINK C++ runtime and accept THINK C++ idiosyncrasies

MUMPS Developer @ [InterSystems, Inc.](#) (1988 - 1991) Cambridge, MA

InterSystems Corporation is a privately held vendor of software systems and technology for high-performance database management, rapid application development, integration, and healthcare information systems.

- Assisted customers in developing and debugging MUMPS programs, and in administration of MUMPS database systems
- Performed maintenance and feature work in the InterSystems MUMPS standard library.
- **Technologies used:** C/C++, MUMPS, vi, UNIX, sunview, X Window System.

Developer @ VERTEK, Inc. (1987 - 1988) Bellevue, WA

VERTEK was the developer of OASYS, a tool used by occupational professionals to perform transferable skills analysis for people seeking to build a new career path.

Junior programming staff working on the OASYS product and on internal tools

- **Technologies used:** C/C++, MS-DOS, Unix, SCO Xenix, C-Tree, RS-232 communications.

Hobbies

- Cooking & Baking
- Home automation hacks - CoffeeSwitch (completed) - designed an electronic switch controlled by HomeKit, and installed it in our coffemaker - Doorbell Notifications - the front doorbell doesn't ring, it sends a push notification to all our phones
- Home DIY remodeling projects - Attic Sauna - I built a good-sized

cedar-lined sauna in some unimproved space in the attic of my house during the pandemic without ruining anything

- Coding - Hacking SimCity 1.0 OSS - HexMap, the Game of Life but on a hex-tiled globe instead of a 2D grid of square cells
- Cartography hacks
 - TransitScope - see near-real-time locations of all buses in the King County Metro system (sadly defunct due to retirement of a key API)



Languages



English: Native



Spanish: B1



French: B1



German: B1



Education

Master of Science in Computer Systems & Engineering

[University of Washington](#) - Seattle, Washington, USA (2015 - 2019)

Bachelor of Arts in Linguistics, minor in Computer Science

[McGill University](#) - Montréal, Québec, Canada (1981 - 1986)