

# Cody Brookshear

Senior Software Engineer @ Mason  
Eugene, OR

## Contact

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## Summary

- Software Engineer with 15 years of experience and a master's degree in Computer Science.
- Pronouns: he / him / his
- Focus on Android, embedded, and backend development
- I enjoy mountain biking and pickleball when not writing code

## Work Experience

### Senior Software Engineer - Mason

Seattle, WA (Remote)

July 2023 - Present (2 years)

- Go Microservices development for a large 100k+ device management system, ensuring seamless operations and scalability.
- Maintain AWS infrastructure (Kubernetes, PostgreSQL, RabbitMQ, SQS, EKS)
- Architected infrastructure for Mason SafeCrew.ai using Django, Render, Timescale, and EMQX, enhancing product performance and reliability.
- Managed IT and Engineering accounts with 3rd party providers, optimizing costs and streamlining processes.
- Performed Android development in Kotlin for Bluetooth LE sensor devices

### Principal Software Engineer - Shopify (6 River Systems)

Waltham, MA (Remote)

May 2022 - May 2023 (1 year)

- I was on the engineering team at 6 River Systems, which was owned by Shopify Inc.
- Node.js (Typescript) development for a warehouse robot running on ROS (Robot Operating System).
- Android development in Kotlin and Typescript (webview) for Zebra TC21 mobile device
- Main project: transformed large Node.js codebase to run in an Android (Chrome) webview
- Implemented a self-updating mechanism for the Android app in Kotlin
- Developed for backend services using Kubernetes, Terraform and Docker on Google cloud (GCP)

### **Software Engineer - Thermo Fisher Scientific (Contract)**

Eugene, OR

November 2021 - May 2022 (7 months)

- C++ development on Windows 10 for Attune NxT Flow Cytometry product
- Updated software to be compatible with new REST APIs (device registration and file transfer)
- Improved company's software engineer hiring process

### **Software Engineer 3 - Datalogic**

Eugene, OR

December 2015 - November 2021 (6 years)

- Served a team technical lead for last 3 years or so
- Design work - working on a small teams means lots of requirements engineering, design, and idea generation is up for grabs. I found myself filling these roles often.
- Worked on Android applications in Java and Kotlin (Scan2Deploy, DXU, SoftSpot)
- Worked on Windows CE applications in C and C# (SoftSpot, Wi-Fi SDK, Wi-Fi control panel, scanner SDK, sample applications, TCP/IP over USB, cesync library)
- Worked on Windows 7/10 desktop software in C# and Electron (DXU Desktop)
- Develop SDKs for Xamarin, Cordova and React Native frameworks for Android development
- Serve as developer advocate - supported developers by answering questions about API usage on developer forum and on Github, creating useful sample apps, advocating internally for developer-requested features
- Served as team DevOps engineer - setup and maintained Gitlab CI/CD infrastructure
- Developed web app using node.js and Angular (Scan2Deploy Studio)
- Built a developer documentation site for the company and kept it up to date, based on Docusaurus
- Lead effort to get other development teams in the company to document their APIs on the site
- Conducted technical interviews for new hires (20 or so)

### **Senior Software Engineer - L3Harris (formerly L-3 Communications)**

Waco, TX

January 2010 - December 2015 (6 years)

- Software Engineer for LINc communications system
- Developed embedded touch screen-based device using Qt QML, and C++ on OpenEmbedded Linux
- Designed and developed C++ software on RedHat Linux to provide VoIP calling, presence information, and recording functionality to the LINc system.
- Helped design and develop a Software Development Kit (SDK) for LINc system using C++ and Boost.
- Developed C-130 aircraft simulator software using C++ and C#. Interfaced with ARINC-429, Digital I/O and Analog I/O devices via UEI hardware
- Short term development on various other projects in Java and C#
- System hardening at the application (using HP FORTIFY) and OS levels

- Maintained LINc VoIP iOS iPhone app in Objective-C.
- Mentored junior engineers
- Helped interview potential new hires

## **Software Engineer - Avaya**

Westminster, CO

April 2006 - January 2010 (3 years)

- Developed software on Avaya Communication Manager telephony server, focusing on SIP and H.323 protocols.
- Used well-structured development processes and tools to deliver new features and bug fixes to large C/C++ Linux-platform code base (7 million+ lines of code).
- Designed, developed and tested User-to-User SIP header RFC implementation
- Performed rotation as a Tier 4 Escalation Support Engineer, working on a variety of critical and non-critical customer issues.
- Demonstrated a wide-range of rapid technical debugging skills - reading code and fixing bugs in C++, reporting problems, quickly becoming an “expert” with system features, capturing, filtering and analyzing log files, providing custom patches to critical product defects, and analyzing traffic on customer data networks (Wireshark)
- Interacted with a variety of other Avaya and 3rd party products (Avaya: SES, AES, CMS, IQ, G860 High Density Gateway. 3rd Party: Cisco phones and servers, NICE and Witness IVRs, Acme Packet Session Border Controllers, Microsoft Unified Messaging, etc.).
- Demonstrated exceptional communication skills with customer support staff and engineers, explaining issues and working to resolve them.

## **Education**

### **Graduate Certificate in Embedded Systems**

University of Colorado - Boulder

- 9 credit hour graduate certificate

January 2007 - May 2008

- GPA: 3.7
- ECEN 5613 - Embedded Systems Design - Introduced system hardware and firmware design for embedded applications. Independently designed and developed a hardware platform encompassing a microcontroller and peripherals. Developed firmware in C and assembly for 8051-based 8-bit processor. Designed and developed a basic VoIP phone as final project.
- ECEN 5033 - Real Time Digital Media
- ECEN 5543 - Software Engineering of Standalone Programs

### **Master of Science in Computer Science**

University of North Texas

August 2002 - August 2005

## Skills

Technology	Experience
C++	10+ years
Golang	2 years
Typescript	2 years
Microservices	3 years
Node.js	2 years
Kotlin	4 years
Java	5 years
C	5 years
C#	2 years
PL/SQL	4 years
Postgres	4 years
Qt Creator	5 years
iOS Development (Objective C & XCode)	1 year
Visual Studio	4 years
Linux	10+ years
Windows (development)	4 years
JIRA	4 years
Ubuntu	4 years
RedHat Linux	5 years
Wireshark	8 years
Network Analysis (TCP/IP, UDP)	10+ years
APIs	5 years
JavaScript	3 years
REST	3 years
Node.js	3 years
Docker	3 years
Kubernetes	3 years
AWS management	2 years
Okta management	1 year

## Certifications / Licenses

- A+
- Network+
- Security+
- Sun Certified Java Programmer