

Mark Dodd

Career Summary

Experienced professional, keenly interested in developing new consumer products. Offers expertise in HW/FW/SW design, engineering processes, project management and regulatory compliance. Tenacious and results-driven team player who is equally effective working within a leadership position or as part of a group of professionals committed to a common objective.

Experience

Jan 2022 - Present **Head of IoT**

Woosh Air - San Francisco, CA

- Manage design and implementation of mobile app, device hardware/firmware and cloud backend.
- Development of predictive analytics.
- Establishing technological roadmap.

Aug 2016 - Dec 2021 **Senior Software Engineer**

Amazon - Toronto, ON

- Technical lead for Local Voice Control in the Alexa Auto SDK.
- Designed offline support for multiple voice agents on device.
- Designed offline support for on device skill execution.
- Responsible for local skill SDKs and liaising with partners.
- Established team charters and mentored new hires.

Mar 2014 - Aug 2016 **Senior Software Developer**

ecobee - Toronto, ON

- Team lead for the Carrier Côr smart thermostat firmware.
- Estimated work and assigned tasks to team members.
- Developed SW for and oversaw Wi-Fi compliance testing.
- Enhanced and added new features to proprietary GUI API.
- Designed proprietary Alexa Voice Service stack.

Feb 2013 - Apr 2014 **Engineering Consultant (Part-Time)**

Detection Innovations - Burlington, ON

- C# client/server system with an SQL database, Python based ZigBee mesh network and a PHP website front end.

May 2011 - Feb 2014 **Design Engineer**

Avvasi - Waterloo, ON

- Wrote APIs and drivers to access low level hardware facilities including I²C busses, EEPROMs and Ethernet controllers.
- Added interfaces to first and third party hardware modules in Avvasi's Xperium OS (Ubuntu derived).

May 2007 - May 2011 **Software Developer**

BlackBerry - Waterloo, ON

- Developed and maintained complete post assembly test solutions for multiple BlackBerry smartphones from prototype to EOL.

Education

B. Sc., Computer Engineering

Minor in Business

University of Manitoba

Graduated with Distinction, 2006

Undergraduate Thesis: "A ZigBee Based Wireless Smart Home"

Languages

Fluent: C++, C, Java, Python, C#

Proficient: Node.js/Javascript, Perl

Experienced: Dart, VHDL, Verilog

Frameworks: .NET, Node.js, Android

SDK/NDK, Flutter, Alexa Voice

Service, Alexa Skills Kit, Flask

Technologies

MCUs/CPUs: ARM, x86, 6800,

68000, PIC16, PIC18

Wireless: Wi-Fi, ZigBee, CDMA,

GSM, Bluetooth, NFC

OS: Windows, Linux, Android, iOS,

MacOS

Other: Alexa, Amazon Web Services,

Automotive Infotainment

Projects

Automated Beer Brewery • location assisted grocery shopping • NFC credit card reader • Uber for snow removal

US Patent 8,401,54