Matthew J. Barichello

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Experience

Programming and Computer Science Tutoring, *Assumption College High School*
February 2018 - present
- Private online Java programming tutoring during weekdays after school
- In-class Java programming and computer science conceptual tutoring

Programming and Electrical Engineering Mentor, *Assumption Robotics Club*
September 2015 - June 2017
- Taught and mentored Java and C programming and circuit design and implementation in robotics

Multi-tiered Networking and Server Deployment, *Blind Beast Servers, Home Lab*
2013 - present
- Deployed fault tolerant continuous integration, git repository and DNS caching servers across multiple hosts in the cloud
- Deployed a lights-out, PXE boot based, KVM cluster over 10Gbe, with redundant 1Gbe seamless fallback routes and isolated management NICs, utilizing mixed consumer-grade and industrial computing solutions

Projects

Logic Analyzer Repair and Restoration - ESP8266, C++, CMake, Bash
July 2018 - present
- Currently restoring a Philips 3585 Logic Analyzer requiring main-board component level repairs, power supply repairs, EEPROM re-flashing and custom hand-built logic probes

Pal - Java, C++, Groovy, Gradle, CMake
July 2018 - present
- Created a Java compiler extension that enables meta-programming through annotations, while retaining full compatibility with preexisting and future JVM and JDK specifications

Space Bodge - Java, Lua, JavaScript, Gradle, ESP8266, Arduino
April 2018
- Created an IoT inspired, open-source, cost-effective, and wifi-enabled game controller architecture backed by web sockets and scripted in Lua

congenial-octo-enigma - Java, Maven, Apache Commons
August 2017
- Created a multi-threaded recursive NBT tree walker with a callback-based binary tag evaluator and interjection API, in Java

Languages & Frameworks

Languages	`Java; C; C++; Groovy; Bash; m4; LaTeX; Python; Lua; Pascal`
Operating Systems	`Windows; macOS; Linux (Debian & derivatives; Red Hat & derivatives; Arch)`
Frameworks	`Processing; OpenCL; OpenGL; Apache Commons; LUKS; Systemd; Iptables; Init; Cron`
Build Tools	`Gradle; Maven; Ant; CMake; Make; Autotools; Waf`

Education

Ontario Secondary School Diploma *Assumption College High School (ongoing)*
September 2015 - present

International Baccalaureate Certificate *Assumption College High School (ongoing)*

DMA Certificate for Advanced Java Programming *University of Toronto*
July 2015

Competitions

September 14-16, 2018	**Hack the North 2018**
April 28-29, 2018	**Massey Hacks IV**
April 1-2, 2017	**Massey Hacks III**
May 21-22, 2016	**Massey Hacks II**

Awards

2018	**First Place Hacker**, *Massey Hacks IV*
2018	**Best Hardware Hack**, *Massey Hacks IV*
2016 - 2018	**Honour Roll**, *Assumption College High School*
2015	**Optimist Award**, *St. William Elementary School*
2015	**Science Proficiency Award**, *St. William Elementary School*
2015	**Academic Excellence Award**, *St. William Elementary School*