JOSEPH GIBSON

COMPUTER ENGINEER

August 2015

EDUCATION

B.S.E, Computer Engineering Grand Valley State University

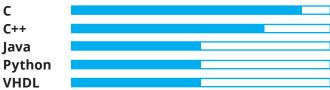
Allendale, MI

GPA: 3.95 Magna Cum Laude

ASEE CEED National Co-op Student of the Year 2014 Academic Excellence Award in Computer Engineering Dean's List Every Semester FIRST Robotics Engineering Scholarship Award for Excellence Scholarship Faculty Award of Distinction Scholarship

Tau Beta Pi Engineering Honor Society President of Spanish Club President and Founder of Brewing Science and Technology Club Vice President of Hardware, Computer Science Club

SKILLS



Git version control FPGAs (VHDL & LabVIEW) Unix Terminal (gdb, make, etc.) LaTeX Adobe Illustrator ARM assembly language Perl, Bash, Awk, Sed HTML, CSS, PHP JavaScript, jQuery Objective C (iOS and OS X) Android Apps (Android Studio) Operating Systems concepts Cryptography concepts

Electrical schematic and PCBdesign (Altium, Eagle, KiCad) SPICE Simulation (LTspice) Oscilloscopes and mutimeters Space Systems and Telescopes Ruggedized Computers Avionics Systems Embedded System Design Regulator Design Robotics Circuit Analysis **Electromagnetic Physics** Cosmology

Particle Physics

LANGUAGES

Network Security concepts

Wireshark and packet logging

TCP/IP Networking & Data Comm.



EXPERIENCE

RFCx

San Francisco, CA

Rainforest Connection

Senior Project Team Leader

2015 - Present

Combat illegal deforestation in Brazil and other rainforests with re-purposed solar-powered Android phones mounted to trees Remote detection of chainsaws, engines, and gunshots PCB Design - Solar Power Control - Android App Design

CERN

Geneva, Switzerland

European Center for Nuclear Research

Research Assistant, ATLAS Experiment

2014 - 2015

Research in Quantum Chromodynamics & proton-proton collisions at Large Hadron Collider

Wrote software in C++ and Python on SLC6 Co-developed the Spectrum plotting software Designed website spectrum.web.cern.ch

NASA

Washington, D.C.

Goddard Space Flight Center

Computer Engineering Co-op, BETTII Project Code 665: Astrophysics, Observational Cosmology Laboratory

BETTII Project: http://asd.gsfc.nasa.gov/bettii/

High altitude, far-infrared balloon observatory for star formation Interfaced with stellar image processing software in C and C++ Developed StarTracker software for Star Cameras

Created an RS-422 communication network on an FPGA

L-3 Communications

Grand Rapids, MI

Avionics Systems

Computer Engineering Co-op, Test Software

2013

Designed software to configure and test avionics instruments Developed GUIs in C using LabWindows/CVI

Tested units under environmental conditions and analyzed data

Grand Rapids, MI Custom Electronics, Inc.

Engineering Consulting

Computer Engineering Co-op

2011 - 2013

Programmed 8-bit Microchip microcontrollers in C using MPLAB X

Wrote software for scientific instrumentation buoys

Designed a series of eight electric guitar effect pedals

Designed electrical schematics and PCBs in Altium Designer

INTERESTS

Languages, travel, culture, cryptography, computer security, mountain climbing, hiking, brewing

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