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Objective

This is filler text till I can create a life objective

Education

- Portland State University   Portland, OR
  B.S. Computer Science, GPA: 3.45   2012

Open Source Software Experience

- **Autonomus Vehicles Team**   Portland State University

  - Created drivers for sensors: ADXL345 (I2C accelerometer), Maxbotixs sonar sensor, Sharp IR Distance sensor, Autopilot Voltage and Current sensor.
  - Discovered a bug in the Microbuiler.eu LPC1343 I2C library that caused an malformed stop message to occur during some multi-byte reads. Worked in a team of two to fix the bug.
  - Created a simple physics simulation of a quadcopter, gyro and accelerometer in python.
  - Added an option to the make file that launches and configures GDB to connect to the remote host (Embedded microcontroller) for debugging
  - Designed and implemented the height measuring subsystem for a quadcopter using a state machine.

- **CS Capstone: Linux Kernel Tinification**   Portland State University

  - Led a capstone (final project) team of 6 students that created several patches to the Linux kernel with the aim of drastically reducing the on disk size for use in embedded environments.
  - Patches include: compile time options for core dump removal, tty removal, real time scheduler removal, and changed the command line options for the decompression stub to compile time.
  - Configured KVM based virtual machines used for testing and debugging the modified kernels.
  - Created testing procedures for the modified kernels.

Work Experience

- **Mentor Graphics**   April 2011 - September 2011
  Software Engineer Intern

  - Created a high level programmable interface using TCL for analyzing SVRF rule files inside of Yield-Server.
  - Modify the built-in TCL info command using C++ and wrappers in YieldServer to suppress the return of internal API namespaces.

- **FLIR**   April 2010 - September 2010
  Software Engineer Intern

  - Ran Coverity (static analysis) on the code base and reported the findings. Explored how to integrate the use of Coverity into the existing build process.
  - Worked with manufacturing to design a new tool to set configurations and upload software to the new model Star SAFIRE.
  - Updated WinSpectrum to use the newest codebase and added the ability to work with NTSC (analog video) input and output. This required working with Blackmagic Capture Cards and updating the onscreen symbology.

- Customer integration of updated WinSpectrum in an unusual networking environment involving serial to Ethernet converters and 9 bit serial protocols.
- Created a proof of concept DLL that allowed Labview to communicate with the remote application protocol interface in the new Star SAFIRE using Visual C++.

Personal Projects

- **Android RTI Calculator**   2012
    - A small app I used to get familiar with the Android environment. RTI is easily compared number relating to suspension performance in offroad trucks, by inputting a few measurement this app gives you your RTI number.
    - Awaiting graphic design work before being offered on Google Play.

Skills

- **Languages**
  C, C++, Visual C++, Python, Java, Shell scripting, TCL

- **Technologies**
  GCC, G++, GDB, objdump, Android, I2C, Git, grep, Coverity, Windows, Boost C++Library's,

Awards & Honors

Mecop Internship, President's list, Dean's list

Clubs & Activities

Portland State Aerospace Society, Viking Motorsports, Autonomous Vehicles Team, IHSTO