# Eric Dinger

egdinger@gmail.com 479-244-6432 5024 SE 33rd Pl Portland, OR 97202

#### Education

• Portland State University

Portland, OR

Maseeh College of Engineering, B.S. Computer Science

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.
- I2C bug
- Created a simple physics simulation of a quadcopter, gyro and accelerometer in python.
- Command line GDB
- Height measuring code

#### • CS Capstone: Linux Kernel Tinification

Portland State University

Led a capstone team that created several patches to the Linux kernel with the aim of drastically reducing the on disk size for use in embedded environments. These patches include compile time options for core dump removal, tty removal, real time scheduler removal, and changed the command line options for the compression stub to compile time. I also managed KVM based virtual machines used for testing and debugging the modified kernels.

#### Work Experience

## • Mentor Graphics

April 2011 - September 2011

Software Engineer Intern

During my internship I created several regressions tests for YieldSever as a way to familiarize my self with the environment. Using TCL I created a high level programmable interface for analyzing SVRF rule files inside of YieldServer. My final project was to modify the built-in TCL info using command using C++ in YieldServer to suppress the return of internal API namespaces.

#### • FLIR

April 2010 - September 2010

 $Software\ Engineer\ Intern$ 

- Ran Coverity 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 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.

## **Personal Projects**

• Android RTI Calculator 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.

## Skills

- Languages C, C++, Visual C++, Python, Java, Android, Shell scripting, TCL
- Technologies GCC, G++, GDB, objdump, Android, I2C, Git, grep, Coverity

## Activities

Mecop Internship Program, Portland State Aerospace Society, Viking Motor Sports, Autonomous Vehicles Team