Mitchell **Waibel**

ALARM.COM C-MAPP FELLOW · GRADUATE STUDENT · COMPUTER SCIENCE

18274 W. 58th Pl. #40 Golden, Colorado 80403

(303)590–8119 | mitchell.waibel@gmail.com | mdub555 | mitchell-waibel

Education

Colorado School of Mines

M.S. IN COMPUTER SCIENCE · · · · · · · · · · · · · · · · · *GPA: 4.0*

- Expected graduation: May 2019

Colorado School of Mines

B.S. IN ENGINEERING PHYSICS · · · · · · · · · · · · · · · *GPA: 3.56*

- Graduated: May 2017
- Graduated Cum Laude
- National Dean's List - 4 Semesters

Technical Skills

Advanced	C++, C, Linux Terminal, Python, Java, LaTeX
Intermediate	OpenGL, MatLab, Android Application
General	Public speaking, technical writing

Coursework

GRADUATE

- Computer Vision
- Simulation
- Applied Algorithms
- Theory of Computation
- Advanced Computer Architecture
- Game Theory and Networks

UNDERGRADUATE

- Senior Design
- Operating Systems
- Algorithms
- Data Structures
- Software Engineering
- Computer Graphics
- Discrete Mathematics
- Database Management
- Computer Organization
- Mobile Application Development
- Game Development

Employment

References upon request

Ricoh   *Boulder, Colorado*

IMAGING AND COLOR SCIENCE INTERN   *May 2018 — August 2018*

- Developed the backend software to capture images in real-time (tested up to 3.6 GB/s) and send it directly to the GPU using C++ and OpenGL.
- Created a GUI in Qt Creator to control the camera and paper drum to save images of various size or stream them to the monitor in real-time.

SEAKR Engineering   *Centennial, Colorado*

SOFTWARE ENGINEERING INTERN   *May 2017 — August 2017*

- Ported a proprietary C++ software package from VxWorks to Linux. The software also moved to a new architecture, which required more rewritten code.
- Installed PetaLinux on the flash memory of a MicroZed development board.

MasterCraft Truck Equipment, Inc.   *Englewood, Colorado*

WAREHOUSE WORKER   *Summers, 2015 — 2016*

- Learned about small scale installation processes.
- Received and processed 2–3 large shipments per day.
- Delivered the finished vehicle to the customer.

Team Project Experience

Mobile Application Development

OPENGL ES DEVELOPER   *Jan 2018 — May 2018*

We worked through the entire process of creating an Android application from scratch using proper design with application fragments and activities. Our app is a Dungeons and Dragons character sheet which allows the user to keep track of their players stats. I focused on the dice-roller that the player can use to roll realistic-looking dice using OpenGL ES.

Senior Design

C++ PROGRAMMER   *August 2016 — May 2017*

Lightning creates atmospheric events in the ionosphere, called Elves, that can be observed at the Pierre Auger Observatory in Argentina. I helped develop a set of modules to work with existing modules that take weighted photon position data from a simulation of an Elve and simulate what that would look like in the detectors at the observatory.

Extracurricular Activity

C++ Asteroids Clone

PROGRAMMER AND DEVELOPER   *May 2017 — PRESENT*

In my spare time, I use the SFML library in C++ to build a clone of Asteroids from scratch. Most of the gameplay is implemented, but I'm still working on the menu and other systems. This project as it is can be found on my GitHub page under Corvus Praedo.