# Aiden Benner

### Software Developer

#### Skills\_

Languages: C++ // C# // C // Java // Python // JavaScript // Scala

Technologies: Django // .NET // Node // React // Angular 2 // Android // iOS

Tools: Git // Unix // Bash // Vim

# Experience \_\_\_\_\_

A Thinking Ape Vancouver, BC

Software Developer Intern

Jan 2018 - May 2018

- Automated the process of adding in-game items using Django and JS saving designers hours per iteration cycle
- Designed a service using Django that sends users notices and push notifications for important in-game events
- Developed an activity on iOS/Android for a mobile game with +10 million downloads that lets players receive and manage in-game alerts and news

Localintel Calgary, AB

Software Developer Intern

May 2017 - Sept 2017

- Created a service that generates pdf reports from municipal microsites for clients using Latex, Angular 2, and C#
- Developed an automated visual CI regression test utility using phantomjs and nodejs to detect frontend changes
- Designed a Python utility to compile site usage data into metric PDF reports for clients and internal monitoring

GEO-SLOPE International Calgary, AB

Software Developer Intern

July-August 2014, 2015, 2016

- Developed a webservice, using C# and SQL, to parse analytics XML from thousands of GeoStudio sessions daily
- Created a utility using C# that uses license data to send customers reminders, automating hours of work weekly
- Implemented a service to detect logged errors and send internal alerts when scheduled tasks and services fail

## Projects \_\_\_\_\_

Raytracer C Feb 2017

aidenbenner/raytracer

- A realistic graphical renderer and vector math library implemented in C++ that simulates light ray projection
- Supports reflections, refractions, translucent material and soft shadows using montecarlo rendering

Lacs Compiler Dec 2017

- Compiles a subset of Scala into Mips assembly using CYK parsing and an abstract syntax tree written in Scala
- Supports closures, inner functions, first class functions, garbage collection and type checking

Orbit Assistant O Dec 2016

aidenbenner/orbit-assistant

- A portable personal assistant written in C++ and built for the TI Tiva and Orbit Boosterpack
- Microcontroller communicates over serial with an event handling framework written in Python

Matrix Utilities O Oct 2016

aidenbenner/matrix-utils

- A web based suite of matrix utilities written in JavaScript that lets users input matrices and perform operations
- Uses Gaussian Elimination to calculate matrix inverses or determinants and renders output with Latex

#### Education \_\_\_\_

**University of Waterloo** 

Waterloo, Canada

Candidate for Bachelor of Software Engineering

2016 - 2021 (Expected)

#### **Awards**

Term Dean's Honour List (1A, 1B, 2A)

2016, 2017

Semifinalist Vex Robotics World Championship (Team 3388)

2016

Semifinalist FIRST Robotics World Championship (Team 4334)

2016

**3rd Junior Division Alberta Collegiate Programming Competition** 

2016