

# Aiden Benner

Software Developer

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## Skills

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

**Technologies:** Django // .NET // Node // React // Angular 2 // Android // IOS

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

## Experience

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### 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 game designers several hours weekly
- Overhauled a legacy news service that notifies users of in game events using Django, Objective-C (IOS) and Java (Android) for a mobile game with over 20k active daily users

### 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 internal metric reports

### 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 log errors and send internal alerts when scheduled tasks and services fail

## Projects

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### Raytracer 🌐

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
- Supports closures, inner functions, first class functions, garbage collection and type checking

### Orbit Assistant 🌐

Sept 2016

aidenbenner/orbit-assitant

- 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 🌐

Sept 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

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### University of Waterloo

Waterloo, Canada

Candidate for Bachelor of Software Engineering

2016 - 2021 (Expected)

## Awards

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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