

# Aiden Benner

Software Developer

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## Skills

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

**Technologies:** .NET // Node // Angular 2 // SQL // Azure

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

## Experience

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### Localintel

Calgary, AB

Fullstack Developer Intern

May 2017 - Sept 2017

- Created a service that compiles and generate report pdfs using **Latex**, **Angular 2**, **.NET Core** and **C#**
- Developed an automated visual frontend regression test utility using **phantomjs**, **nodejs**, and **C#**
- Designed a **Python** utility to compile and filter analytics data into client ready pdfs

### GEO-SLOPE International

Calgary, AB

Backend Developer Intern

Jul-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
- Developed a service using **C#** to automatically backup log files stored on the production servers over FTP
- 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++**
- Supports reflections, refractions, translucent material and soft shadows

### Neural Network for Printed Optical Character Recognition 🌐

Sept 2015

aidenbenner/handwriting-ann

- A neural network and backpropagation implementation written in **Java** to classify images of printed text
- Uses **OpenCV** to segment and normalize images of printed text into individual characters

### Orbit Assitant 🌐

Sept 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**
- Features include reddit and email clients, with location dependent weather and time updates

### Matrix Utilities 🌐

Sept 2016

aidenbenner/matrix-utils

- A web based suite of matrix utilities written in **JavaScript**
- Uses Gaussian Elimination to calculate matrix inverses or determinants and renders output with **Latex**

## Education

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### University of Waterloo

Candidate for Bachelor of Software Engineering

Waterloo, Canada

2016 - 2021 (Expected)

## Awards

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

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