

# BRANDON BARKER

## SOFTWARE ENGINEER

### CONTACT



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### LANGUAGES

Python C#  
Javascript Mathematica  
Java Visualforce  
HTML/CSS/LESS C++  
Bash

### FRAMEWORKS

NodeJS WebGL  
Gulp Jackson/JSON  
Grunt JDBI  
Makefile Google Cloud  
ReactJS JQuery  
Amazon Web Spring  
Heroku Google Web  
Django Numpy  
Maven Docker  
Gradle web2py  
SQL Flask  
Postgres MySQL

### EDUCATION

COMPUTER SCIENCE MAJOR  
BUS. MANAGEMENT MAJOR  
MATHEMATICS MINOR  
West Chester University  
2017-2021

### SOCIAL



github.com/projectbarks



linkedin.com/in/projectbarks



@projectbarks

### EXPERIENCE

#### CESIUM GS

##### SOFTWARE ENGINEER INTERN

May 2019 – Aug 2019

- Built integrations for popular 3D content creation tools - WebODM, Blender, and 3D Max - for smooth upload to Cesium ion to generate 3D Tiles for use in CesiumJS and other 3D engines.
- Championed efforts at improving Cesium JS rendering and solely orchestrated most of the changes within version 1.61.

#### COMMA.AI

##### SOFTWARE ENGINEER INTERN

May 2018 – Aug 2018

- Developed a mapping engine capable of loading 5,000,000+ miles of data.
- Structured toolset to generate 3D Tiles, render the data within a browser context, and provide metadata when interacting with the mapping frontend.
- Succeeded in delivering all components of the project within scheduled time frames and further advanced my software development skills.

#### DOKKIO

##### SOFTWARE ENGINEER INTERN

Jun 2017 – Jan 2018

- Leveraged initiatives in analysing 2000GBs of data and created a recommendation system for categorizing files and folders.
- Implemented a document preview engine capable of loading documents with hundreds of pages using HTML5.
- Optimized the file system architecture and enhance the efficiency of file searching and matching.

### EXPERIENCE ABRIDGED

#### YURGOSKY – SOFTWARE ENGINEER INTERN

Jun 2016 – Oct 2016

#### AIRPHRAME – SOFTWARE ENGINEER INTERN

Jun 2015 – Oct 2015

#### CLOUDMINE – SOFTWARE ENGINEER INTERN

Jun 2014 – Aug 2014

### AWARDS

#### TOP 10, BEST HARDWARE & HEALTH HACK AT PENNAPPS

Sep 2019

Engineered an assistive device for cross-space navigation and obstacle avoidance through SLAM with haptic feedback.

#### BENJAMIN E. FABER AWARD

Nov 2018

Scholarship awarded to earning students studying mathematics as a minor and display exceptionalism within their classes.

#### BEST AUTONOMOUS AT FTC WORLD COMPETITION

Apr 2017

Awarded the Control Award for implementation of a Kalman filter, PID drive, and integration of sensors in the control of the teams robot.

### PROJECTS

#### IOCLIST

Eye exams through your phone, testing: astigmatism, color blindness and visual acuity.

#### BEATSYNC

Web App that uses WebRTC to sync music across multiple devices with low latency.

#### IOCLIST

Eye exams through your phone, testing: astigmatism, color blindness and visual acuity.