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   *3.9*
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

ELDERLYF
Self-navigating and obstacle avoidance walker for the blind elderly.

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

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