

Brandon Barker

Software Engineer // Computer Scientist

+1 (215) 530 - 1609
contact@brandonbarker.me
brandonbarker.me
github.com/projectbarks
linkedin.com/in/projectbarks

Languages & Skills

Python
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JavaScript
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Java
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TypeScript
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SQL
.....

C#
....

Haskell
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C++
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Frameworks // NodeJS, WebGL, RESTful, Google Cloud, Amazon Web Services, ReactJS, NumPy, Django, Docker, SQL, Flask, PostgreSQL, MySQL, Express, SASS, Git, GraphQL, Android, React Native, Amazon Web Services, Hive, Spark, Presto

Work Experience

UBER

May 2020 – Aug 2020

SOFTWARE ENGINEER INTERN

San Francisco, CA

- Collaborated with the Marketplace Data & Intelligence team to build largescale data analysis tooling.
- Addressed several areas within the software stack to deploy enhancements quickly while adapting to company paradigms. Worked with distributed technologies such as Hive, Presto, and Spark.
- Architected and implemented a dynamic H3 Hexagon clustering product to ease experimentation, a system crucial for Uber's machine learning models.

CESIUM GS

May 2019 – Aug 2019

SOFTWARE ENGINEER INTERN

Philadelphia, PA

- Enhanced SaaS platform that empowers developers and data providers to build dynamic 3D geospatial applications.
- 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

May 2018 – Aug 2018

SOFTWARE ENGINEER INTERN

San Francisco, CA

- Contributed to the development of the full-stack dashboard application for a self-driving car kit developed by George Hotz, focusing on data to solve severe problems.
- Developed a mapping engine managing and visualizing over 5,000,000 miles of data.
- Structured toolset to generate 3D Tiles and provide metadata when interacting with the mapping frontend.

DOKKIO

Jun 2017 – Jan 2018

SOFTWARE ENGINEER INTERN

San Francisco, CA

- Initiated a better way to search content, give the content a business context, organize it, and work on it with others to make content-focused teamwork more effective.
- Analyzed 2000GB of data and engineered a recommendation system for categorizing files and folders.
- Implemented a document preview engine capable of loading documents with thousands of pages.

Education

MAJOR COMPUTER SCIENCE, BUS. MANAGEMENT & MINOR MATHEMATICS

Aug 2017 – May 2021

WEST CHESTER UNIVERSITY

GPA 3.9

Honors & Awards

TOP 50 WORLDWIDE HACKER BY MAJOR LEAGUE HACKING

Jan 2020

Chosen from 100,000+ hackathon participants who exemplify diversity, technological innovation, and leadership.

1871 AWARD

Jan 2020

Recognized 71 undergraduates who are high achieving in academics, leadership, community-engagement, and career-readiness.

TOP 10 OUT OF 1500, BEST HARDWARE HACK & BEST HEALTH HACK AT PENNAPPS

Sep 2019

Engineered an assistive device for spatial navigation and obstacle avoidance through SLAM with haptic feedback.

Projects

ELDERLYF

Sep 2019

Jetson Nano – Segnet – Python – Intel Realsense

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

ENTIUM

Aug 2018

Pointclouds – Big Data – Python – JavaScript

Pointcloud optimizer and metadata compressor to generate 3D Tilesets for CesiumJS.