

# KUSH KHANOLKAR

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## EDUCATION

**2020**                      **University of California, Berkeley (3.81 GPA)**  
*B.S in Electrical Engineering and Computer Science*

## SKILLS AND TOOLS

**Proficient:** Python (Scikit-Learn, XGBoost, Pandas), Java, C# (Unity, UWP), Git

**Familiar:** Machine Learning (Keras, TensorFlow), JavaScript (Node, Express, Angular), Android Development, C++, SQL, MongoDB

## EXPERIENCE

**2018**                      **BTG Ekos Data Mining, Intern (Bothell, WA)**

Jun – Aug

- Data mined the *EkoSonic* catheter data logs (10+ GB) in Python for patterns and abnormalities in device statistics including therapy length, patient body temperature, average power, etc.
- Wrote and presented multiple research reports which were used to help justify a new durability test to the FDA and identify potential areas of concern for the company to test
- Key findings include finding bi-modal failure timing distribution, independence of temperature decay rate with time, and a higher-than-expected operating power in certain types of treatment

**2017-2018**                **Codebase-Berkeley Software Consulting, Team Lead (Berkeley, CA)**

- Led the backend team for a Berkeley software consulting club on data science focused projects
- Responsible for the development of the automatic data cleaning system that preprocesses and feeds user data into application analytics pipeline in Python Pandas
- Created a Gradient Boosted model in XGBoost that predicted ad click through rate, allowing ad-tech startup to increase price conversion accuracy by 22 percent

**2016**                      **Microsoft Research, Summer Intern (Redmond, WA)**

Jun – Aug

- Used Microsoft Azure Cognitive Services APIs in C# to develop a Universal Windows Platform (UWP) application that assists therapists teach emotion recognition to children with autism
- Responsible for the API integration along with support for hardware peripherals
- Tested game with autistic children and submitted final code to the product team for release

**2015**                      **Pioneer Inc, Intern (Bellevue, WA)**

Jun – Aug

- Worked in a startup team of six to develop a coupon-centric mobile web-app that aimed to help Brick and Mortar stores compete with online retailers
- Responsible for the development of the app backend using NodeJS, Express and MongoDB

## SELECTED INDEPENDENT/HACKATHON PROJECTS

**Code Carbon**  
(Personal)

- Developed a mobile education game, to teach young students the basics of environmental science
- Responsible for developing the full game logic and data storage in Unity C#
- Won multiple awards including the Congressional App Challenge and Imagine Tomorrow first prizes, and launched application on both [Android](#) and iOS markets

**Safe World**  
(Hackathon)

- Developed a web application that uses historical crime data to provide safe walking directions
- Responsible for developing the pathing algorithm in Python Pandas and optimizing it to be able to run in real time for practical use (down from 2 minutes)
- Also responsible for data visualization in Unity VR (C#), that won best VR application at Berkeley Hackathon

**Gifter**  
(Hackathon)

- A web application that uses user profiles to create a personalized monthly “surprise gift” program
- Responsible for developing a gift recommendation algorithm using the eBay API and NLP libraries in JavaScript (Node/Express)