KUSH KHANOLKAR

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EDUCATION

2021 **University of California, Berkeley** *(3.87 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)