Adam Ash

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Education

University of California Berkeley - *Cumulative GPA: 3.72, Major GPA: 3.86*   **Berkeley, CA**
- BS, Electrical Engineering & Computer Science, College of Engineering   *Graduated May 2020*
- Relevant Coursework: Databases, Operating Systems, Algorithms, Data Structures, Computer Architecture, Data Science, Discrete Mathematics, Probability Theory, Artificial Intelligence, Machine Learning, Neural Networks, Convex Optimization

Professional and Research Experience

Sports Betting Innovative Analytics   **Remote**
Software Engineer - Artificial Intelligence   *January 2021 – May 2021*
- Designed and built neural network models to predict at-bat outcomes to be used in Markov chain based baseball game predictions
- Created TensorBoard visualization dashboard for above neural networks to bolster understanding of sensitivities and outliers
- Queried noSQL databases to extract existing data and create transformation pipelines adding new predictive features to games

UC Berkeley Multimedia Research Group   **Berkeley, CA**
Undergraduate Researcher – MediaEval Project   *November 2020 – May 2021*
- Researched related work and designed a deep learning classifier to predict if a Covid-19 and 5G related Tweet is fake news or not
- Given a graph of each Tweet's distribution, computed features using the Graph2Vec and DeepWalk algorithms
- Compiled findings into a paper presented at the MediaEval 2020 Conference, and received the second best score of 14 entries

DoNotPay   **San Francisco, CA**
Software Engineering Intern - Artificial Intelligence   *Summer 2020*
- Built and shipped an internal database management tool for non-engineers on the team using Apollo, React, and GraphQL
- Created interactive visualization tools showing company progress over time in selected metrics such as user outreach
- Designed and engineered an interactive model estimating the likelihood of users subscribing based on their previous actions
- Architected an efficient pipeline using MongoDB and Python to automatically query, clean, and analyze user data

UC Berkeley Mobile App   **Berkeley, CA**
iOS Developer   *February 2020 – June 2020*
- Worked with three other students to develop, maintain, and debug the UC Berkeley Campus Information iOS app
- Created interactive views enabling users to see library schedules and space availability, and book study rooms
- Modified the team-wide campus landmark data storage system to access information from Firebase more efficiently

Berkeley Renewable and Appropriate Energy Lab   **Berkeley, CA**
Data Science Intern   *September 2018 – May 2019*
- Led a data analysis team of five students to develop an interactive energy usage model of the entire country
- Collected, cleaned, and analyzed data to find correlations between selected social demographics and carbon emissions
- Used RStudio, matrix math, and econometric methods to implement linear regressions and visual models of data

Projects

MAD Donations   **August 2020**
- Created a non-profit monthly subscription service that matches users with charities that work in the areas that users support (e.g. LGBTQ+ Rights, Environmentalism)
- Designed the user sign up flow of creating an account, selecting causes to support, and choosing monthly donation amounts
- Implemented Firebase Auth for user account management
- Orchestrated and implemented MongoDB schemas on the backend server using Flask MongoEngine

Pokedex iOS Application   **September 2020**
- Used Xcode to create an iOS application in which the user is able to view Pokemon by grid or list as well as search by attribute
- Designed a data storage system enabling the user to store Pokemon as favorites that persist after the app is closed and reopened
- Implemented an informational page for each Pokemon in which a summary, picture, and link to more information is displayed

Other

Languages: Web (React, JavaScript, TypeScript, HTML, CSS), Mobile (Swift, Xcode), Backend (Python, Flask, Java, Go, C)
Technologies: Database (SQL, MongoDB), Machine Learning (TensorFlow, TensorBoard, PyTorch)
Affiliations: Alpha Epsilon Pi, UC Berkeley ASUC OCTO, Engineers for a Sustainable World, National Merit Scholar Finalist