NEHA HUDAIT

(540) 641-6840 | nhudait@berkeley.edu | linkedin.com/in/nehahudait | nhudait.github.io

Education

UC Berkeley - Management, Entrepreneurship, & Technology Program **Expected May 2022**

B.S. Electrical Engineering & Computer Science, B.S. Business Administration, Global Poverty, and Practice Minor

Relevant Coursework:

- Artificial Intelligence
- Data Structures
- Machine Structures
- Advanced Algorithms
- Project Management for Data Science
- Principles and Techniques of Data Science
- Probability and Statistics
- Entrepreneurial Leadership in a Technical World
- Principles of Business

Experience

Technical Product Management Intern, SAP Ariba **June 2020 - August 2020**

- Collaborated with the Platform Search Team to develop Search 3.0, a tool designed to streamline sourcing and procurement
- Implemented new Machine Learning and Data-Driven based features that analyze user intent and provide tailored results
- Created an automated algorithm and dashboard which updates live to reflect Key Performance Indicators as search data flows
- Developed Key Performance Indicators for Search 3.0 to integrate clickstream data features:
  - Coded features that determined the similarity of queries and closeness, in time, when consumers made queries
  - Discovered relationships between the time of day, query, and the number of users that were active at a given time

Machine Learning Developer, University of California, San Francisco Medical Center **January 2020 - May 2020**

- Improved AI-enabled detection and prevention techniques for cardiovascular disease to predict frames of ultra-sound videos
- Utilized Keras to explore the following frame-prediction approaches:
  - Implemented an LSTM (Long Short Term Memory) Model to predict one frame from the prior frame
  - Implemented a CNN (Convolutional Neural Net) which predicts a particular video frame from the thumbnail given

Data Analyst, University of California, Berkeley Goldman School of Public Policy **January 2020 - May 2020**

- Aggregated census tract data to visualize trends between race, socioeconomic statuses, asthma rates, and other factors to create single indicators of vulnerability to examine environmental justice across the United States
- Used Pandas and ArcGIS to create environmental justice visualizations to present indicators in a human-readable fashion

Projects

TrickTweet—Twitter Language Model

- Created a dynamic Tweet generator which takes in Twitter handles and outputs autogenerated tweet based on users' behavior
- Designed and built Word Bigram models, Word Models with GloVe word embeddings, as well as Character Models
- Trained Model on generic Tweet data, froze the weights, and then trained it on a specific user's tweets to decrease training time from 40 minutes to 5 minutes; achieved .5 categorical cross-entropy training loss with 120,000 samples.

Deep Convolution Generative Adversarial Network (DCGAN) for Breast Cancer Image Augmentation

- Improved Image Accuracy for Medical Classification of Breast Cancer Tumors by performing the following process:
  - Test object detection model for baseline accuracy on original training data through CNN
  - Use the same data to train DCGAN and generate 10,204 synthetic images over 300 epochs and two classes
  - Retrained CNN using a combination of real and synthetic images to improve validation accuracy from 80% to 95%

Skills

Languages: Python, Java, C, Javascript, HTML, CSS, Ruby, R, SQL, React, Swift

Platform/Tools: TensorFlow, Pandas, Numpy, Keras, Photoshop, Illustrator, Indesign, XD, Apache Kafka/Spark, ArcGIS, Github

Extracurriculars

Co-President, DataGood **June 2020 - Present**

- Co-founded and led an organization dedicated to exposing students to data science applications to social good sectors
- Designed and developed curriculum for educational workshops relating to NLP, machine learning, and geospatial analysis

External Vice President, Institute of Electrical and Electronics Engineers (IEEE) **August 2018 - Present**

- Organized and executed professional development events such as resume/interview workshops and research fairs
- Led diversity and inclusion efforts (EECS Women's History Month) through speaker series, workshops, and career fairs
- Developed course material for two student-run courses: Micromouse (introductory robotics) and Hands-On PCB Design