Mengti Sun

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EDUCATION

Computer Science B.A., Cognitive Science B.A, University of California, Berkeley *Expected Dec 2020*

EXPERIENCE

National Taiwan University **Taipei, Taiwan**
Research Assistant *Jul 2019 – Aug 2019*
- Developed an Android app on Asus Zenbo robot that enabled it to greet to users according to their gender, age, and emotion using TensorflowLite
- Trained a gender classifier with IMDB-wiki dataset, an age classifier with Kaggle fer2013 dataset, an emotion classifier with UTKface dataset using MobileNet with 78%, 80%, and 66% accuracy correspondingly

Rockontrol, Inc. **Beijing, China**
Machine Learning Intern *May 2019 – Jul 2019*
- Employed time series forecasting to analyze weather data of Beijing and Taiyuan collected by sensors on street lamps
- Implemented a LSTM-net that forecasted pollution of the upcoming ten days with 0.6 of validation loss
- Designed an efficient MySQL database that decreased querying time for weather data from sensors by 30%
- Collaborated with a team to design a ML model using feature engineering and made a presentation to my department

Baidu, Inc. **Beijing, China**
Software Engineer Intern *May 2018 – Aug 2018*
- Remodeled a friend-discovery page of "Baidu Hi", a mobile app designed for intracompany communication, allowing users to find the working station number by typing someone's name
- Developed an internal keyword analysis tool of an intracompany web app that aggregated keyword data using AWS S3

UC Berkeley EECS Department **Berkeley, CA**
Computer Graphics Researcher with Professor Carlo Sequin *Aug 2018 – May 2019*
- Simulated evolving systems with reaction-diffusion and cellular automata algorithms in JavaScript, explored influential factors including the kill rate, the feed rate, the weight of diagonal/adjacent neighbors, etc
- Designed and implemented a user-friendly interface for generating and solving mazes

IPMD, Inc., **Berkeley, CA**
A.I. Engineer Intern *Dec 2017 – Dec 2018*
- Developed an A.I. platform called "Project M" using computer vision and DNN to accurately identify emotions through facial expressions with 80% accuracy in order to diagnose mental diseases and assist medical emergencies
- Optimized supervised learning algorithms to analyze nearly 90,000 images collected through web scraping

Computer Science Mentor (CSM) **Berkeley, CA**
Course Mentor *Aug 2018 – Present*
- Hired by EECS department as a mentor for introductory EECS courses (CS61A & EE16B)
- Responsibilities include leading weekly sections for a group of six students, managing logistics, holding review sessions for the whole class, and creating worksheets

PROJECTS

SeeTheUnseen - Java, HTTP, GCE VM *Jul 201 9 - Present*
- Developed an Android app using cloud OCR to assist text reading tasks for users with vision impairment

Maze Generator/Solver – Java *Aug 2018 – May 2019*
- Developed a user-friendly interface with multiple maze generation and solving algorithms including bi-directional DFS, Wilson's, Prim's, Kruskal's algorithms
- With buttons and sliders, users are able to control the starting/ending points and the speed of generation

Tripy - Swift, Firebase *Nov 2018 - Dec 2018*
- Designed and developed a cloud-based itinerary iOS app that enables users to plan their trips
- Integrated functionalities including user authentication, adding friends and messaging

Bear Maps - Java *Sep 2018 - Oct 2018*
- Developed a web app that finds the optimal route between two points in Berkeley, using a QuadTree to store images, a rasterization algorithm to concatenate images, and A* search to find the shortest path
- Designed features including turn-by-turn directions, autocomplete, and location search

SKILLS

Languages: Python/Django, Java, SQL, C/C++, R, SHTML/CSS/JS, Golang, Swift, Scheme, RISC-V, LaTex
Others: MySQL, Oracle, Flask, numPy/sciPy/Pandas, Amazon AWS, ROS, git, Docker, Jupyter, PyTorch, Tensorflow