Can Koc

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EDUCATION

University of California, Berkeley **Expected May 2017**

B.S. in Electrical Engineering and Computer Sciences

COURSEWORK

Data Structures, Machine Structures, Algorithms, Statistics, Probability, Artificial Intelligence, Machine Learning, Operating Systems, Computer Vision(Graduate), Deep Learning(Graduate), Finance

EXPERIENCE

Apple Inc. Sunnyvale, CA | 06/06/16 – 08/23/16

Software Engineering Intern in Apple Maps Team

- Worked on an end to end Maps localization application using deep learning with Caffe.
- Created Geomath APIs for feeding images from the Apple Flyover Data into the neural network.
- Created a database of images using location indexing and preprocessed them with oversampling, downsampling.
- Built and trained a regression neural network using the database of flyover images to predict the location and orientation of a user and achieved state of the art accuracies.
- Developed a framework for measuring the strength of future localization models using matplotlib, seaborn, ggplot.

TubeMogul Inc. Emeryville, CA | 06/04/15 – 08/24/15

Software Engineering Intern in Real Time Bidding Team

- Developed a distributed system that submits campaigns from TubeMogul platform into Facebook platform
- Developed a logging method using Amazon SQS, S3 and MySQL to recover from data submission failures.
- Used caching and threads to improve efficiency of getting campaign data and submitting it to Facebook.

Berkeley AI and Robotics Lab Berkeley, CA | Current

Undergraduate Researcher

- Worked on automation and simulating leg behaviors of Velociroach (6 legged milli robot).
- Currently writing a paper on Tactile Sensing and environment mapping using Machine Learning.
- Paper will be submitted to IROS 2017 and presented in Bay Area Robotics Symposium Nov. 2016.

PROJECTS

Cave Dodger: Designed the art and developed the engines for a single player android game app inspired from the Flappy bird.

Anime Faces: Image classification project to recognize faces in animes using domain adaption on neural networks.

ATLAS: Landmark recognition using TF-IDF and NMF to associate images with a set of tags (e.g. bridge, tower, etc.) obtained from Clarifai's Image Recognition API and a Linear SVM to classify images. Recognized images of Eiffel Tower, Golden Gate Bridge, Stonehenge, and the Colosseum with 95% accuracy.

Osiris: Android Twilio application that lets users access real time Yelp, Google Maps, weather information without wifi or data.

Smart Power Nap: Android application that detects when a user falls asleep and measures the amount of power nap a user received. This app is available on Google Play app store.

Hando: Arduino web application that lets users log in to the Hando website to unlock their house door without the need for a physical key.

SKILLS

Python, Java, C, Caffe, Numpy, Scipy, Hadoop Map Reduce, Rest API, Android, Git, AWS (EC2, S3, SQS), Node JS