Bora Uyumazturk

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EDUCATION

Stanford University, *Stanford, CA*
Master of Science in Computer Science (Specialization in Artificial Intelligence)   *Sept. 2019 – Mar. 2020*
GPA: 4.09 / 4.00

Stanford University, *Stanford, CA*
Bachelor of Science in Mathematics   *Sept. 2015 – Jun. 2019*
GPA: 4.03 / 4.00
Honors: Phi Beta Kappa, Graduated with Distinction

WORK EXPERIENCE

Viaduct, *Menlo Park, CA*
Machine Learning Engineer   *Mar. 2020 – Present.*
- Formulated and implemented data analytics products for automotive OEMs as machine learning engineer at venture-backed startup.
- Spearheaded end-to-end development of root cause analysis dashboard. Implemented data mining algorithm to generate insights, led product sprint to create customer facing dashboards, and pitched solution to clients.
- Leveraged NLP architectures to develop embeddings for high dimensional, discrete sensor data, improving model performance across clients by 20%.
- Built web application to dynamically query and depict vehicle movement patterns using React, Amazon Athena, and kepler.gl.
- Leveraged PySpark and Tensorflow for large scale data-processing and model development.

deeplearning.ai, *Palo Alto, CA*
Head Teaching Assistant   *Jun. 2019 – Apr. 2020*
- Head teaching assistant for AI for Medicine Specialization on Coursera.
- Developed assignments and lessons which have reached more than 30,000 students.
- Covered topics such as CNNs, U-Net, survival analysis, Cox proportional hazards, random forests, among others.

Stanford Machine Learning Group, *Palo Alto, CA*
Research Assistant   *Sept. 2018 – Sept. 2019*
- Developed and validated models for tumor classification using convolutional neural networks.
- In addition to research, participated in weekly reading groups covering healthcare, statistics, and AI.

Cubist Systematic Strategies, *New York, NY*
Research Analyst Intern   *Jul. 2018 – Sept. 2018*
- Modeled bid/ask spread dynamics around economic events using Gaussian Processes. Applied combinatorial optimization techniques (simulated annealing, greedy algorithms) to analyze relationships and cluster entities in the foreign exchange market.

Research Projects and Publications

A Deep Learning Assistant for Cancer Subtype Classification (published in *npj Digital Medicine*)   *Sept. 2018 – Apr. 2019*
- Developed and validated a deep learning powered diagnostic assistant to help pathologists differentiate between subtypes of liver cancer using digital pathology slides. Created python library for sampling from annotations of whole slide pathology images. Presented poster at Frontiers of AI Assisted Care Symposium. Accepted to present extended abstract at ML4H conference at NIPS 2019.

Functional Analysis of Wearable Data   *Feb. 2020*
- Compared different methods (such as the discrete fourier transform, kmeans clustering, PCA, and NMF) for extracting functional information from continuous wearable accelerometer data. Validated methods on downstream task of predicting resting heart rate of monitored individuals. Implemented parallelized ETL pipeline for processing 20 GB of accelerometer data at second-by-second resolution. Code available at github.com/bora-uyumazturk/functional_wearable_analysis.

ORGANIZATIONS

Stanford Chaparral, *Palo Alto, CA*
Art Director   *Sept. 2016 – Jun. 2018*
- Served as art director for Stanford's oldest humour magazine.
- Published various cartoons and written pieces and provided constructive criticism on pieces submitted by others.

SKILLS & OTHER

Programming Languages and Packages: Python, Apache Spark, Tensorflow, R, Javascript, C++, C, Java, Matlab
Human Languages: Turkish, Spanish
Interests: Cartooning, Translating Poetry, Backgammon, Turkish Coffee