

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

Selected Courses: CS229 (Machine Learning), CS228 (Probabilistic Graphical Models), CS231N (Convolutional Neural Networks for Visual Recognition), CS161 (Design and Analysis of Algorithms), CS110 (Principles of Computer Systems)

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

Selected Courses: MATH205A (Graduate Real Analysis), MATH205B (Graduate Functional Analysis), ECON180 (Honors Game Theory), MATH154 (Algebraic Number Theory), MATH148 (Algebraic Topology)

WORK EXPERIENCE

Viaduct, Menlo Park, CA

Machine Learning Engineer

Mar. 2020 – Present.

- Used cutting-edge deep learning techniques to develop embeddings for high dimensional, discrete sensor data which improved model performance across clients by 20%.
- Formulated and implemented time-varying cox proportional hazards model for vehicle predictive maintenance.
- 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 10,000 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

- Worked on projects applying machine learning techniques to problems in healthcare.
- Developed and validated models for classification and perception using deep learning.
- 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, PySpark, Tensorflow, R, C++, C, Java, Matlab

Human Languages: Turkish, Spanish

Interests: Cartooning, Translating Poetry, Backgammon, Turkish Coffee