

BARUCH TABANPOUR

646-660-1918 – bt2390@columbia.edu – blog.tabanpour.info

WORK

Machine Learning Engineer – Squarespace

Feb 2017-Present

- Built python microservice framework with continuous deployment on Kubernetes for the the first machine learning models in production at Squarespace.
- Internationalized text based search models in 6 languages using machine translation ([blog post](#)).
- Trained image tagging and saliency detection models on 9M+ image datasets with multiple GPUs. The saliency model is used for style suggestions and the image tagging models for SEO/accessibility.
- Created a functional wrapper around Luigi for sharing datasets and building models.
- Developed semantic search for a variety of different products: template search, text to image search, and push notifications based on site traffic.

Data Scientist – ondeck

July 2015-Jan 2017

- Built fraud model with scoring service running in production, averting ~\$250k in fraud per quarter.
- Developed loss forecasting and time-to-default models based on payment and behavioral data.
- Performed AB tests for email campaigns and administered AWS instances used for modeling.

Research Assistant - Computer Vision – Columbia University

June-Aug 2015

[Research Assistant - Physics](#) – CUNY Laboratory for Nano and Micro Photonics

June-Oct 2013

Summer Research Fellow - Physics – National Institute of Standards in Technology

May-Aug 2012

[Research Intern - Climatology](#) – NASA Goddard Institute of Space Studies

May-Aug 2010

TOOLS

- Daily: Python, Tensorflow, Keras
- Infrastructure: Kubernetes, Docker, Drone, Consul/Prometheus, S3, HDFS, Spark, GCP
- Familiar: R, MATLAB, C++, HTML/CSS/JS

PERSONAL PROJECTS

[yarlp](#) – yet another reinforcement learning package in tensorflow for reproducible RL experimentation

[Joint image-text embeddings](#) - mapping images and text into the same space using CCA

[Intro-to-Reinforcement-Learning](#) - full solutions to Introduction to RL by Sutton & Barto

[sinkhorn-knopp](#) - implementation of Sinkhorn Knopp algorithm

[Handwritten-generation](#) - implementation of handwritten generation with RNNs

[climatechangebot](#) - climate change chatbot

EDUCATION

Columbia University

May 2015

M.S. Applied Physics and Mathematics – GPA: 3.87 / 4.00

The City College of New York, Macaulay Honors College

Feb 2014

B.E. in Electrical Engineering, Minor in Physics – GPA: 3.96 / 4.00, Rank: 1/152