Richard Boeri Decal

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Skills ⁺ denotes proficiency

Languages Python⁺ · R · BASH · ECL · Español⁺ · English⁺ · Italiano

Tools Tensorflow · Pandas⁺ · SciPy⁺ · PySpark · Flask · Hadoop · Tidyverse · PostgreSQL

· MongoDB · HBase · HPCC · SSH

Passions Al for social good, pedagogical chatbots, carbon sequestration, blockchain, anti-

censorship, social justice, computational neuroscience, travel, photos, my tiny home.

Experience

Data Scientist, Master's capstone project

2018

Studying effect of chronic conditions on heart failure using embeddings, clustering, & Markov models.

Research Intern, Allen Institute for Brain Science

Summer 2018

Enabling neuron tracing of petabyte-scale brain microscope data using deep reinforcement learning.

Classroom Mentor, Intro to Programming Nanodegree, Udacity

2017 - 2018

Provided one-on-one guidance for students learning Python and data analysis.

Research Assistant, Fairhall Lab, Dept. of Biophysics, Uni. of Washington

2014 - 2016

Simulating mosquito thermal plume navigation using agent-based models of windtunnel experiments.

Publications

Burman, Yu, Poole, **Decal**, Pallanck. "Analysis of neural subtypes reveals selective mitochondrial dysfunction in dopaminergic neurons from parkin mutants". *PNAS* 2012. 109(26):10438-43.

Kunttas-Tatli, Zhou, Zimmerman, Molinar, Zhouzheng, Carter, Kapur, Cheatle, **Decal**, McCartney. "Destruction Complex Function in the Wnt Signaling Pathway of Drosophila Requires Multiple Interactions Between Adenomatous Polyposis Coli 2 and Armadillo". *Genetics* 2012. 190(3):1059-75.

Decal. "Quantifying Small RNA Concentrations in *C. elegans*". Honors thesis. 2011.

Other Projects

Tensorpack	Contributed to deep reinforcement learning framework for medical image data.
PolceStops	Created a webapp to query and visualize the Stanford Open Policing dataset.
Income Prediction	Predicted incomes using California census data using feature engineering, support vector machines, and cross-validation.
CartPole	I solved a physics game using a deep policy gradient neural network.

Education

M.S. Data Science, New College of Florida. Full tuition scholarship.
Artificial Intelligence Engineer Nanodegree, Udacity
B.A., Chemistry/Biology (Honors), New College of Florida
Expected Dec. 2018
2017
2011