Richard Boeri Decal

Sarasota, FL, USA · (+1) 48-448-DECAL · richard.decal@ncf.edu
crypdick · richarddecal · crypdick · richarddecal.com

Skills

$^+$ **denotes proficiency**

Languages	Python$^+$ · R · BASH · RegExp · ECL · Español$^+$ · English$^+$ · Italiano
Tools	PyTorch, Keras, Tensorflow · Pandas$^+$, MongoDB, PostgreSQL · SciPy$^+$ · PySpark, Hadoop, HPCC · Plotly Dash, Flask · Tidyverse · BeautifulSoup · AWS
Passions	AI for good: carbon sequestration, existential risk, healthcare, anti-propaganda, anti-censorship, education, molecular bio. Travel, photos, my tiny home.

Experience

Lead Data Scientist, *Pacemate* 2019
Improving cardiac patient care with automated time-series analysis of ECG data.

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
Guided students 1-on-1 in the *Python for Data Analysis* Track.

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

Author ID	NLP analysis to deanonymize the *New York Times* "Resistance Op-Ed" author.
Tensorpack	Contributed to deep learning framework for automating medical imaging tasks.
Capsule Net	Using CapsNet for manifold learning of notMNIST; synthesizing new digits.
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. 2018
B.A., Chemistry/Biology (Honors), *New College of Florida* 2011