

Richard Boeri Decal

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Skills

+ denotes proficiency

Languages Python⁺ · R · SQL · BASH · Español⁺ · English⁺ · Italiano
Packages Tensorflow · Pandas⁺ · Numpy⁺ · Scikit-learn · Matplotlib⁺ · Tidyverse
Passions Travel, teaching, learning, social justice, my tiny home. Research interests: molecular biology, climate science, computational neuroscience.

Experience

Research Assistant

Seattle, WA

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

2014 — 2016

- Iteratively developed dynamical agent-based models of mosquito thermotaxis and benchmarked them against experimental data.
- My models will be further validated using electrophysiological & tethered flight experiments to test theories about multi-modal sensation and decision-making.

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.

Projects

PolceStops Created a webapp to query and visualize the [Stanford Open Policing dataset](#).
CartPole I solved [CartPole](#) (a continuous classic control game) using policy gradients.
Income Prediction Predicted incomes using [California census data](#) based on 14 characteristics using feature engineering, support vector machines, and cross-validation.
Roboskeeter (ongoing) Modelling mosquito heat-tracking behavior from windtunnel experiments.

Education

M.S. Data Science , <i>New College of Florida</i> . Full tuition scholarship.	Expected 2019
Artificial Intelligence Engineer Nanodegree , <i>Udacity</i>	2017
B.A., Chemistry/Biology (Honors) , <i>New College of Florida</i>	2011