

Richard Boeri Decal

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🐱 [crypdick](#) · **in** [richarddecal](#) · 📄 [crypdick](#) · 🏠 [richarddecal.com](#) · updated 2017-10-14

Skills

+ denotes proficiency

Algorithms Supervised, unsupervised, and reinforcement learning · Cross-validation · PCA
Languages Python⁺ · R · SQL
Packages Tensorflow · Pandas⁺ · Numpy⁺ · Scikit-learn · Matplotlib⁺
Misc. Español⁺ · English⁺ · Italiano · UNIX systems⁺
Passions Travel, teaching, learning, social justice, tiny living. Research interests: molecular biology, climate change, computational neuroscience, +++.

Projects

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 Created models of mosquito heat-tracking behavior during foraging from wind-tunnel experimental data.
(ongoing)

Experience

Research Assistant

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

Seattle, WA

2014 → 2016

- Simulated mosquito thermonavigation (data munging, design, coding, visualization, analysis).
- Learned concepts in neuronal dynamics which are relevant to artificial deep neural networks.

Publications

“[Analysis of neural subtypes reveals selective mitochondrial dysfunction in dopaminergic neurons from parkin mutants](#)”. *PNAS* 2012. 109(26):10438-43.

“[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.

“Quantifying Small RNA Concentrations in *C. elegans*”. Honors thesis. 2011.

Education

M.S. Data Science, *New College of Florida*. Expected 2019.

Artificial Intelligence Engineer Nanodegree, *Udacity & Kaggle*

B.A., Chemistry/Biology (Honors), *New College of Florida*

Sarasota, FL

[Udacity.com](#)

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