Pablo Martin, PhD

917-937-8829 | pablo.martin.yevenes@gmail.com
www.linkedin.com/in/pablo-g-martin | https://github.com/pablo-martin |
www.pablo-g-martin.com

Engineering Tools

Languages and Frameworks: Python (Pandas, NumPy, scikit-learn, Keras), Tensorflow, MATLAB, C++, Linux, UNIX/BASH, HTML, Git
Databases, Web, and Cloud: PostgreSQL, Flask, Heroku, AWS
Hardware: Arduino, Raspberry Pi, GPU compute

Education

Mount Sinai School of Medicine. PhD, Neuroscience. *2013 - 2018*
Columbia University. BS, Applied Mathematics. *2007- 2011*
Activities: Mathematics Society, Varsity Lightweight Rowing team

Experience

Fellow - Insight Artificial Intelligence Program. New York, NY. January, *2019 – Present*

- Hierarchical coarse and fine label classification of mushrooms using +1M images.
- Implemented multi-head CNN using Tensorflow achieving 36% top-5 accuracy.
- Served the model (Flask) in AWS ecosystem for real-time inference.

Mount Sinai School of Medicine. New York, NY. *June, 2018 – September, 2018*

- Built LSTM model (Keras + Tensorflow) to predict behavioral choice from neural activity.
- Classifier achieved 20% higher decoding accuracy than previous implementation (logistic regression).
- Helped separate phenotype of rats with a mutated gene associated with autism.

Max Planck Institute for Brain Sciences. Leipzig, Germany. *May, 2012 – May, 2013*

- Developed pipeline for automatically segmenting the layers of the neocortex
- Worked with 100+GB of high-resolution MRI scans.

Columbia University, HIT Lab. (Remote). *Aug, 2011 – May, 2013*

- Analyzed ~10GB of accelerometer data
- Implemented multinomial logistic regression (MATLAB) to classify motion, e.g. walking, going up stairs, falling, etc.
- Program successfully learned to automatically call 911 if an elderly person fell.

Mount Sinai Innovation Partners. New York, NY. *January, 2018 – April, 2018*

- Analyzed existing market landscape for a specific novel therapeutic.
- Prepared scientific background research and economic analysis for patent application

Side Projects

NLP – Hunterbot. *April, 2018 – June, 2018*

- Trained LSTM (Keras + Tensorflow) on the works of Hunter S. Thompson.
- Served on AWS ecosystem (www.pablo-g-martin.com/hunter)

Publications

Martin, P., Shapiro, M.L. Medial Prefrontal Cortex mediates Meta-Reinforcement Learning (in review, 2019). *PLOS Computational Biology*