# **GREGG TABOT, PH.D**

## SENIOR MACHINE LEARNING ENGINEER



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San Francisco/Bay Area, CA

# professional profile

An accomplished and professional hard worker with a background in creating functional machine learning models using large unstructured datasets. Has a solid **NEUROSCIENCE** foundation in thinking abstractly, tackling analytical problems, coding up solutions University of Chicago, 2016 and presenting research neatly in both written or oral form. Works very well in teams or as an independent contributor and has experience managing both large and small groups.

## education

PH.D, COMPUTATIONAL

**B.S. COMPUTER SCIENCE** 

**Mathematics Minor** Virginia Tech, 2010

# professional experience

August 2020 - Present

#### MACHINE LEARNING ENGINEER | Twitter, San Francisco, CA

- Implemented models which populate video carousels on Twitter with personalized video tweet recommendations
- Designed, implemented and maintained models recommending Twitter topics for users to follow using previous engagement data
- Responsible for data engineering and defining behavioral events which are in turn used to both build training data and measure model performance
- Frequently recognized as a team leader, leading many brainstorms sessions and discussions; Led and created bi-weekly knowledge sharing sessions

June 2017 - March 2020

### MACHINE LEARNING ENGINEER | test.ai, San Francisco, CA

- Startup company focusing on building AI tools to automate software development testing
- Set up initial ML framework and model serving pipeline
- Designed and trained computer vision models that labeled mobile app screens (home, settings, profile page, etc) from a training set of over 250,000 labeled and unlabeled unique screenshots

June 2011 - December 2016

#### RESEARCH SCIENTIST | Bensmaia Lab, University of Chicago, Chicago, IL

- Graduate research lab specializing in using quantitative techniques to investigate neuroprosthetics and somatosensory neuroscience
- Created regression models relating the amount of force applied to a prosthetic sensor to the amount of cortical microstimulation needed to evoke the similar physical percept
- Published results in several scientific articles in multiple reputable papers (see publications list)

additional skills

- Comfortable with implementing ML models in both PyTorch and Tensorflow
- Well versed in multiple machine learning concepts such as recommender systems, deep learning/neural networks, classification and non-linear modeling
- Fluent in data analysis languages/tools such as Pandas, NumPy, Matplotlib and scikit-learn
- Coding samples available at <a href="https://github.com/gtabot/ml-coding-samples">https://github.com/gtabot/ml-coding-samples</a>

## publications

- **TABOT, G.A.**, Dammann, J.F., Berg, J.A., Tenore, F.V., Boback, J.L., Vogelstein, R.J., & Bensmaia, S.J. (2013). Restoring the sense of touch with a prosthetic hand through a brain interface. Proceedings of the National Academy of Sciences, 110(45), 18279-18284.
- Goodman, J.M., **TABOT, G.A.**, Lee, A.S., Suresh, A.K., Rajan, A.T., Hatsopoulos, N.G., & Bensmaia, S. (2019). Postural Representations of the Hand in the Primate Sensorimotor Cortex. Neuron, 104(5), 1000-1009.
- Berg, J.A., Dammann, J.F., Tenore, F.V., TABOT, G.A., Boback, J.L., Manfredi, L.R., ... & Wilcox, R. (2013). Behavioral demonstration of a somatosensory neuroprosthesis. Neural Systems and Rehabilitation Engineering, IEEE Transactions on, 21(3), 500-507.
- Kim, S., Callier, T., TABOT, G.A., Gaunt, R.A., Tenore, F.V., & Bensmaia, S.J. (2015). Behavioral assessment of sensitivity to intracortical microstimulation of primate somatosensory cortex. Proceedings of the National Academy of Sciences, 112(49), 15202-15207.
- **TABOT, G.A.**, Kim, S.S., Winberry, J.E., & Bensmaia, S.J. (2015). Restoring tactile and proprioceptive sensation through a brain interface. Neurobiology of Disease, 83, 191-198.
- Callier, T., Schluter, E.W., TABOT, G.A., Miller, L.E., Tenore, F.V., & Bensmaia, S. J. (2015). Long-term stability of sensitivity to intracortical microstimulation of somatosensory cortex. Journal of Neural Engineering, 12(5), 056010.
- Kim, S., Callier, T., **TABOT, G.A.**, Tenore, F.V., & Bensmaia, S.J. (2015). Sensitivity to microstimulation of somatosensory cortex distributed over multiple electrodes. Frontiers in systems neuroscience, 9.
- TABOT, G. (2015). Proprioception. Encyclopedia of Computational Neuroscience, 2498-2501.
- TABOT, G. (2015). Somatosensory Cortex: Organization. Encyclopedia of Computational Neuroscience, 2753-2756.

### references

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