BRIAN K LEE

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https://github.com/brilee
http://moderndescartes.com/essays

TECHNICAL EXPERIENCE

MuGo, a Go AI inspired by AlphaGo (github.com/brilee/MuGo), June 2016 - Present
Python, NumPy, Tensorflow

- Implemented a Go AI using Monte Carlo Tree Search and deep convolutional neural networks that can play at 3kyu level (intermediate club player) and can correctly predict expert moves 51% of the time.
- Implemented AlphaGo's policy network in TensorFlow and trained it with supervised learning techniques.
- Leveraged my math, statistics, and Go expertise to debug neural networks.
- Used coding best practices to create tools for preprocessing datasets, monitoring training, and interfacing with third-party Go servers and tools.
- Optimized Python and NumPy code for featurizing Go positions.

Recurse Center, Participant, Aug 2016 - Nov 2016

- Gave talks on REST, AlphaGo, mental math tricks, and Python profiling.
- Investigated limitations of Python profilers and ways to visualize profiler output.
- Pair programmed on audio fingerprinting, style transfer, and word2vec projects.

Hubspot, Software Engineer, May 2014 - May 2016
Python (Django), Java (Dropwizard), Javascript (React/Flux)

- Created tooling to migrate data from a C# CMS to a Python rewrite.
- Developed a crawler to survey websites and import them into Hubspot's CMS.

Sookbox, Software Engineer at Sookbox, Nov 2013-Feb 2014
Python, Javascript, C, ObjC, Linux

- Revamped the core RPC system to improve modularity and support unicode.

Szostak and Mahadevan Labs, Research Fellow, Feb 2012-Aug 2013
MATLAB, Python, LaTeX, ImageJ

- Optimized MATLAB scripts to segment and analyze data from videos.
- Applied statistical and physical models to predict lipid membrane behavior.

EDUCATION

Harvard University, Cambridge, MA
A.M. in Chemistry 										November 2013

Massachusetts Institute of Technology, Cambridge, MA
B.S. in Chemistry 										June 2011