Alexis B. **Cook**

DATA SCIENTIST · MACHINE LEARNING EXPERT

Guanajuato, GTO, Mexico

571-216-4129 | alexis.cook@gmail.com | alexisbcook.github.io | alexisbcook | alexis-cook-a6127753

Education

Brown University *Providence, RI, USA*
M.S. IN COMPUTER SCIENCE *August 2014 - May 2016*
- Awarded a National Science Foundation Graduate Research Fellowship.

University of Michigan-Ann Arbor *Ann Arbor, MI, USA*
M.S. IN APPLIED AND INTERDISCIPLINARY MATHEMATICS *August 2012 - May 2014*
- Awarded a Marjorie Lee Browne Fellowship.

Duke University *Durham, NC, USA*
B.S. IN MATHEMATICS AND RUSSIAN LANGUAGE AND CULTURE *August 2006 - May 2010*
- Awarded an Angier B. Duke Scholarship, the premier merit award for undergraduate study at Duke University.
- Awarded a Goldman Sachs Fellowship, American Economic Association Minority Scholarship, and Mellon Mays Fellowship.

Skills

Computer Python, Matlab, Mathematica, LaTeX, HTML, CSS
Languages English (Native), Spanish (Intermediate), Russian (Intermediate)

Experience

Self-Employed *Guanajuato, GTO, Mexico*
DATA SCIENTIST *August 2016 - Present*
- Participated in competitions for data scientists on the Kaggle website.
- Maintained blog with articles on topics in machine learning.

Brown University *Providence, RI, USA*
DATA SCIENTIST *August 2014 - May 2016*
- Developed and implemented an algorithm in Matlab to predict connections in the brain from imaging data of neuronal activity.
- Constructed an algorithm in Python with advanced techniques (Bayesian nonparametrics, autoregressive hidden Markov models) to find patterns in video recordings of sign language.
- Implemented an algorithm in Java that used computer-generated data and advanced machine learning (action planning in an iPOMDP framework) to study how a machine can learn how to behave in real-time based on data collected from its environment.

MIT Lincoln Laboratory *Lexington, MA, USA*
SUMMER RESEARCH INTERN *May 2014 - August 2014*
- Developed a new algorithm (DSPCA on a low-rank approximation of the modularity matrix) to detect patterns in very noisy data, where previous methods failed to detect a signal.

University of Michigan-Ann Arbor *Ann Arbor, MI, USA*
MATHEMATICAL BIOLOGIST *August 2012 - May 2014*
- Implemented a mathematical model to determine an optimal drug treatment strategy from data on anticancer drug effectiveness.
- Published results in Volume 12, Issue 6, December 2015 issue of Mathematical Biosciences and Engineering (MBE).

Naval Criminal Investigative Service (NCIS) *Quantico, VA, USA*
INTELLIGENCE ANALYST *March 2011 - May 2012*
- Researched and integrated data from various sources in order to produce written analytical products.
- Worked collaboratively with Department of Defense personnel in high-pressure situations and under tight deadlines.
- Selected for the Pat Roberts Intelligence Scholars Program (PRISP).