

Alexis Cook

MACHINE LEARNING PROFESSIONAL · MATHEMATICIAN · COMPUTER SCIENTIST

☎ 571-216-4129 | ✉ alexis.cook@gmail.com | 🏠 alexisbcook.github.io | 📱 alexisbcook | 📄 alexis-cook-a6127753

Education

Brown University

M.S. IN COMPUTER SCIENCE

- Awarded a National Science Foundation Graduate Research Fellowship.

Providence, RI, USA

August 2014 - May 2016

University of Michigan-Ann Arbor

M.S. IN APPLIED AND INTERDISCIPLINARY MATHEMATICS

- Awarded a Marjorie Lee Browne Fellowship.

Ann Arbor, MI, USA

August 2012 - May 2014

Duke University

B.S. IN MATHEMATICS AND RUSSIAN LANGUAGE AND CULTURE

- 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.

Durham, NC, USA

August 2006 - May 2010

Skills

Computer Python, Matlab, Mathematica, LaTeX, HTML, CSS, JavaScript, GitHub

Languages English (Native), Spanish (Intermediate), Russian (Intermediate)

Experience

Self-Employed

DATA SCIENTIST

- Participated in competitions for data scientists on the Kaggle website.
- Maintained blog with articles on topics in machine learning.

Guanajuato, GTO, Mexico

August 2016 - Present

Brown University

MACHINE LEARNING RESEARCHER

- 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.

Providence, RI, USA

August 2014 - May 2016

MIT Lincoln Laboratory

SUMMER RESEARCH INTERN

- 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.

Lexington, MA, USA

May 2014 - August 2014

University of Michigan-Ann Arbor

MATHEMATICAL BIOLOGIST

- 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).

Ann Arbor, MI, USA

August 2012 - May 2014

Naval Criminal Investigative Service (NCIS)

INTELLIGENCE ANALYST

- 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).

Quantico, VA, USA

March 2011 - May 2012