

Adam J. Trexler, PhD

adam.trexler@ngc.com | www.adamtrexler.com | ajtrexler.github.io

I am a highly motivated expert in quantitative analysis, hypothesis testing, and machine learning.

Skills

- **Programming languages:** Python (scikit and pandas) and MATLAB
- **Analytics:** Supervised (support vector machines, naïve Bayesian, trees, ensemble methods) and unsupervised (NMF, PCA, clustering) machine learning methods, image processing, natural language processing (NLTK), statistics, correlation methods, data visualization (seaborn, matplotlib, Jupyter, Origin), SQL, MongoDB.
- **Communication:** Experience briefing senior leadership and customers, five presentations (100+ attendees) at large international scientific conferences, and numerous presentations at smaller (<50 attendees) seminars.
- **Leadership:** Co-mentored three junior scientists for one-to-two year research projects. Working group lead on data science and modeling.

Experience

Data Scientist, 2017-Present.

Research Facilitation Laboratory, Northrop Grumman Corporation.

- Built predictive models using a variety of machine learning methods for clearance adjudication support in USARMY population. Assisted implementation of models in deliverable software product. Supported senior leadership requests for information and produced briefing materials on machine learning efforts in RFL.

Postdoctoral Researcher, 2013-2017.

National Institutes of Health, Bethesda, MD. Advisor: Dr. Justin Taraska.

- Investigated the molecular details of insulin release and diabetes using fluorescence microscopy and large-scale image processing and quantitative analysis.
- Wrote two first-author publications; three total publications in peer-reviewed journals.

Doctoral Candidate, 2007-2013.

Yale University, New Haven, CT. Advisor: Dr. Elizabeth Rhoades.

- Investigated a key protein molecule underlying Parkinson's and initiated a new experimental method in my research group that formed the basis for 6+ publications from the lab.
- Created and executed a successful application for a research grant proposal for \$82K from competitive NIH F31 fellowship mechanism.
- Wrote three first-author publications; nine total publications in peer-reviewed journals.

Education

Yale University, PhD, Molecular Biophysics and Biochemistry, 2013.

- Received the Mary Ellen Jones Dissertation Award for top departmental dissertation in 2013.

McDaniel College, BA, Biology and Biochemistry, 2007.

- GPA 4.06/4.30, GRE: 640V, 690Q, 5.5W
- Summa Cum Laude, Phi Beta Kappa.