# alexander flyax:

- data scientist with a background in Cellular and Circuit Neuroscience

Chicago, IL 617-281-3421 aflyax@gmail.com

#### http://aflyax.github.io

http://github.com/aflyax twitter.com/aflyax www.linkedin.com/in/aflyax

## **Key Strengths**

- Data analysis, machine learning/predictive analytics and statistical inference algorithms using **Python** (IPython, Pandas, scikit-learn, statsmodels, numpy), **R**, Julia, Matlab
- Linear/logistic regression with regularization, random forests, ensemble methods (gradient boosting classifiers and regressors), dimensionality reduction (PCA, PLS), LDA, SVMs, deep learning, clustering, feature generation and selection, model optimization
- Data visualization (matplotlib, seaborn, Bokeh, ggplot, Adobe Illustrator, FIJI, Power Point, Igor Pro)
- <u>Participant</u> in Kaggle competitions (top 1.5%)
- Comfortable working in Windows and Linux environments
- Excellent communication skills (oral, written, interactive formats)
- Can speak and write freely in Russian, experience with translations

#### Education

- B.S. Computer Information Systems. 2001–2005. Tulane University. GPA: 3.9
- B.S. Neuroscience. 2001–2005. Tulane University. GPA: 3.8
- Ph.D. Neuroscience. 2005–2013. Brandeis University. GPA: 3.8

### Relevant work experience

University of Texas, San Antonio: post-doctoral researcher

- June 2014 present
- · Analyzed electrophysiology time series data using Matlab and Python
- · Visualized/presented data using Matlab, Python, Illustrator, Power Point
- · Research paper in preparation
- Brandeis University: post-doctoral researcher

Aug 2013 – June 2014

- · Wrote scripts and analyzed data using Matlab
- · Acquired and visualized electrophysiology data using Igor Pro
- · Several research papers in various stages of submission/revision
- Brandeis University: Ph.D. candidate

Aug 2005 – Aug 2013

- · Collected, analyzed, and presented electrophysiology data using Matlab
- · Analyzed confocal images of fluorescent neurons using FIJI and Matlab
- · Lectured: Principles of Neuroscience, General Biology Lab
- Tulane University: B.S. student, undergraduate independent researcher

Aug 2001 – June 2005

- · IT assistant (Howard-Tilton Memorial Library)
- · Tutor of Calculus, Statistics, Biology, Russian, Neuroscience
- · Worked in multiple laboratories as an undergraduate researcher

#### Awards and honors

- Jack Kent Cooke Foundation Undergraduate Scholar, 2003–2005
- Putnam Cultural Enrichment Program Grant, Tulane University, New Orleans, LA, 2004
- Honors College, Tulane University, New Orleans, LA, 2002–2005
- Dean's List, Tulane College, New Orleans, LA
- Valedictorian Scholarship, Tulane University, New Orleans, LA, 2001
- Founders Scholarship, Tulane University, New Orleans, LA, 2001
- High School Valedictorian (magna cum laude), Robert E. Lee High School, Baton Rouge, LA, 2001