

GRANT FIDDYMENT

3 Banner Way, Camden, NJ 08103 gmf@neurocoding.info <http://neurocoding.info>

CAREER SUMMARY

I am a data scientist proficient in machine learning with Matlab, Python, and R. As a graduate student, I worked with a team of epilepsy researchers to develop a data-driven pipeline for human seizure analysis. I also have experience simulating neural systems and analyzing networks using graph-theoretic tools. Currently, I apply these techniques to study how basketball is played.

EDUCATION

- Ph.D., Computational Neuroscience SEPTEMBER 2016
Boston University, Boston, MA GPA: 3.87/4
Advisors: Mark Kramer, Uri Eden
- M.A., Mathematics MAY 2011
University of Georgia, Athens, GA GPA: 3.9/4
Exams in numerical analysis & complex analysis
Advisor: Caner Kazanci
- B.S., Mathematics MAY 2009
- A.B., English GPA: 3.86/4
University of Georgia, Athens, GA
Magna cum laude with high honors

WORK EXPERIENCE

- Data Scientist, Philadelphia 76ers DEC 2016-PRESENT
Working with the Analytics & Strategy department, I develop tools to support team scouting, strategy, and training.
- Adjunct Professorial Lecturer, American University DEC 2016-PRESENT
Instructor for Predictive Analytics ITEC 621 and Python Programming ITEC 696
- Graduate Researcher, Boston Univeristy SEPT 2011-SEPT 2016
PIs: Mark Kramer, Uri Eden. Working with a team of mathematicians and epilepsy clinicians, developed a model-driven pipeline for analyzing spike-wave seizures. Research was awarded doctoral training grant from Epilepsy Foundation.
- Graduate Teaching Assistant, University of Georgia AUG 2009-MAY 2011
Instructor for Precalculus MATH 1113 and Calculus MATH 2200.

COMPUTER SKILLS

Advanced Knowledge: Matlab, Python, R, SQL, Linux/Unix, L^AT_EX, Maple
Basic Knowledge: Flask, Java, Javascript, HTML/CSS, Mathematica

AWARDS AND HONORS

Finalist, ESPN Hackathon Open Division, Sloan Sports Analytics Conference	2016
Participant, Summer Workshop on the Dynamic Brain, Allen Institute for Neuroscience	2015
Pre-Doctoral Training Grant #330118, Epilepsy Foundation "Data-Driven Modeling of Seizure Termination"	2015
CompNet Travel Award, Boston University	2013
Graduate Medical Sciences Scholarship, Boston University	2011
Graduate Teaching Assistantship, University of Georgia	2009
Phi Beta Kappa, University of Georgia	2006
Hollingsworth Award , Dept. of Mathematics, University of Georgia	2006

PUBLICATIONS AND POSTERS

- Kass RE, Amari S, Arai K, Brown EN, Diekman CO, Diesmann M, Doiron B, Eden UT, Fairhall AF, Fiddymment GM, Fukai T, Grun S, Harrison MT, Hellas M, Nakahara H, Teramae J, Thomas PJ, Reimers M, Rodu J, Rotstein HG, Shimazaki H, Shinomoto S, Yu BM, Kramer MA (2018). Computational neuroscience: mathematical and statistical perspectives. *Annual Review of Statistics and Its Application* 5: 183-214.
- Martinet LE, Fiddymment GM, Madsen JR, Eskandar EN, Truccolo W, Eden UT, Cash SS, Kramer MA (2017). Human seizures couple across spatial scales through traveling wave dynamics. *Nature Communications* 8: 14896.
- Fiddymment GM (2016). Point process modeling as a framework to dissociate intrinsic and extrinsic components in neural systems. Boston University.
- Fiddymment GM, Sokolowski S, Kramer MA (2015). Functional Network Observations of Diseased Brain States. In Jaeger D, Jung R (Eds.) *Encyclopedia of Computational Neuroscience*, Vol. 1, pp 1234-1236. Springer New York Heidelberg Dordrecht London.
- Fiddymment, GM, Ahmed O, Martinet LE, Eden UT, Cash SS, Kramer MA (2015). Statistical and computational modeling of meso- and microscale human seizure. *Society for Neuroscience Abstracts*, 2015.
- Fiddymment, GM, Ahmed O, Martinet LE, Eden UT, Cash SS, Kramer MA (2015). Point process modeling of human seizure. *Statistical Analysis of Neural Data (SAND 7) Conference Abstracts*.
- Fiddymment, GM, Yazdanbakhsh A (2013). Large-scale, anatomically-constrained simulation of the visual hierarchy. *ICCNS Abstracts*, 2013.

INTERESTS AND ACTIVITIES

- Point process models, generalized linear models
- Neural networks, deep learning
- Numerical analysis, high-performance computing, quantum computing
- Sports analytics, basketball