# DRAKE E. KNAPPER

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#### **SUMMARY**

Skilled analyst seeking an opportunity to leverage experience with large data sets, while acquiring new skills to broaden my professional scope and influence.

#### **EXPERIENCE**

## **Urban Science Applications**

Atlanta, GA

Data driven automotive consulting firm Analyst

April 2016 - September 2018

- · Maintained and queried databases using SQL for various projects
- · Created detailed deliverables for clients using Excel, Microsoft SQL server, and other proprietary applications
- · Completed a range of client requested ad hoc projects in a timely manner
- · Maintained client applications by updating databases and working closely with the client and teammates to provide technical support
- · Created predictive statistical models from large data sets using SQL and R to inform business decisions
- · Analyzed and interpreted real time data sets to provide business solutions
- · Wrote accessible protocols for technical tasks for shared team use

## Georgia State University

Atlanta, GA

Student Researcher/Neuroscience

September 2013 - April 2016

- · Conducted research in the interdisciplinary field of mathematical neuroscience modeling neuronal circuits and studying their dynamics
- · Wrote a software application for simulation of small neural networks
- · Used C++ to create integration algorithms to integrate systems of differential equations Using python, created an interactive GUI for changing parameters of integration, viewing plots of solutions, analysis, and saving data
- · Parallelized computations with Python and CUDA
- · Performed analysis with Python on additional systems of equations to warrant their inclusion in our application

### **EDUCATION**

## Georgia State University

December 2015

Bachelor of Science, Physics

Cum Laude, Honors Graduate, Brains and Behavior Summer Scholar (2014-15)

Publications Quantitative and Qualitative Stability Analysis of Penta-Rhythmic Circuits

J. T. Schwabedal, D. E. Knapper, A. L. Shilnikov. Nonlinearity, 2016

**Presentations** D. Knapper et. al. (2015) Polyrhythmic Sychronization in Modular Networks

Poster session presented at 2015 SIAM Meeting on Applied Dynamical Systems

D.Knapper et. al. (2015) Understanding Patterns in Neural Networks Poster session presented at 2015 Society of Mathematical Biology Meeting

#### **SKILLS**