

Resume

Carson James
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Education

MS Mathematics, 2016-2018, Oklahoma State University, GPA: 4.0

BA Mathematics, 2013-2016, Oklahoma State University, GPA: 3.929

Experience

Research/Academic: I have research experience in the area of arithmetic dynamics (see thesis here: [link](#)). My peronal interests are mostly in the area of probability and optimization. As such I am self-learning stochastic integration with respect to semimartingales and will eventually learn about stochastic control (see notes here: [link](#)).

Applied: I have completed and am currently working on several mathematics, statistics and data science projects. Some bigger projects include: a stock price analysis project involving a mix of graph analysis, time series analysis, distribution fitting and montecarlo methods as well as a neural network construction project involving deep learning on various data-sets via the automatic creation of neural networks with convenient options for architecture and shape.

Programming: All the applied projects that I work on are implemented in Python because there are som many great wrappers for optimized code written in C and Fortran. I am also familiar with C and the GNU scientific library. I'm familiar with various data analysis packages in python including numpy, pandas and scipy. If you are interested, you can see some of my code here: [link](#) I am familiar with manipulating data via a database management system that utilizes SQL. I often use a combo of the requests and psychopg2 packages in python to grab data from what API that I intersts me and store the JSON in a postgreSQL database for later analysis. This is the case with the stock price analysis project.

Teaching:

- four sections of business calculus (recitation instructor)
- two sections of trigonometry (instructor)
- two Cambodian highschool English classes, grades 11,12 (instructor)

Skills

Software:

- Python: numpy, pandas, matplotlib, scipy, statsmodels, pytorch
- C: GNU scientific library
- SQL
- Linux (Basic)

Languages:

- English (native)
- Spanish (fluent)