

drewfustin@gmail.com | xxx.xxx.7316

Currently:

Data Scientist with Digital H2O

Drew Fustin

Education

PhD Physics (2012) – The University of Chicago

*Experimental Dark Matter Physics – Juan Collar, advisor*

MS Physics (2005) – The University of Chicago

BS Physics, Mathematics, Astronomy (2004) – Drake University

Experience

 GrubHub Inc.

*Insights Analyst* (2013-2014)

* Currently helping to design an experimental product rollout [details redacted]
  + Optimizing restaurant delivery boundaries by calculating isochrone contours using the Google Maps API to maximize delivery driver efficiency/cost by time of day
  + Predicting future restaurant order volume as a key experimental parameter
  + Building the economic model for this initiative to achieve profitability and sustainability
* Co-created the News Bureau program – a PR initiative to generate data-intensive stories related to proprietary gH data, providing insights to news agencies and trade publications while increasing media mentions and establishing gH as the thought-leader in the industry
  + Increased the data-driven story rate six-fold in 2013 compared to 2012, contributing to a near tripling of total media mentions of the gH brands, vastly improving gH’s SEO
* Generated the core content for an industry white paper, surveying the effects of a variety of key metrics/parameters on revenue generation for both gH and our restaurant customers
  + Created diner demand curves in relation to delivery fees and minimums to aid restaurants and gH in optimizing revenues per order
* Designed a d3 map highlighting cuisine availability/orders to show supply/demand disparity
* Developed methods to indirectly identify unknown diner demographics (college students, office workers, hotel travelers, and more)



The University of Chicago

*Graduate Research Assistant/Data Analyst* (2008-2012) [also 2004-2007]

* Collaborated on an experiment that set best-in-world dark matter limits
* Characterized background rates and detector efficiencies by comparing (gigabyte-scale) experimental data with multi-interaction neutron scattering Monte Carlo simulations
* Wrote real-time diagnostic software to monitor and control temperature and pressure settings of vital experimental components to ensure safe remote detector operation

Susquehanna International Group

*Assistant Options Trader* (2007-2008)

* Built position reporting and P&L management tools for senior trading staff, interfacing Excel through VBA to Bloomberg and other in-house tools
* Worked closely with traders and market-makers in ensuring smooth market data transmission and in providing trade recommendations on published bids/offers

Skills [ high proficiency | medium proficiency ]

Python (pandas, matplotlib, SciPy, NumPy), MATLAB, Tableau, Excel/VBA, R, d3.js, C++

SQL (MySQL, SQL Server, PostgreSQL), MongoDB, Hive, AWS/EMR, ETL

Statistics (linear/logistic regressions, machine learning, time series analysis)