

# Akos Furton

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## EDUCATION

**MS Analytics**, Imperial College London 2016-2017  
Courses: Machine Learning, Network Analytics, Data Management, Data Structures and Algorithms

**BS Mathematics and Statistics**, University of Texas at Austin 2012-2016  
**BBA Business Honors and Supply Chain Management**, University of Texas at Austin

## EXPERIENCE

**Dunnhumby, Research Analyst** Sept. 2016 – Present

- Developed application to optimize non-convex pricing models in Python and GAMS, decreasing server processing time by 30%
- Segmented customers from transactional data using multivariate analysis techniques to test product pricing strategies in an A/B testing framework
- Extended existing rules-based pricing system to include an optimization driven pricing strategy that models consumer choice behavior
- Presented to Dunnhumby senior management and stakeholders from Operations and Finance departments a 3% increase of in-stock availability by aligning prices with consumer demand

**3M Corporation, Supply Chain Analyst Intern** May 2015 – Jul. 2015

- Developed an application in Python and SQL to reduce inventory at distribution centres leading to \$300,000 annual savings
- Designed interactive dashboards by cleansing data to measure KPI metrics that track product availability at warehouses over time to improve in-stock score by 3%
- Classified inventory using k-means clustering and implemented Holt-Winters and ARIMA seasonal forecasting to optimize inventory safety stock

**Sanger Learning Center, Statistics Tutor** Jan. 2013 – May 2016

- Tutored calculus, statistics, and computer science for students at the University of Texas 10 hours per week in individual and group sessions
- Improved performance for up to 15 students per semester by explaining complex mathematical concepts in easy to understand terminology
- Implemented training program on navigating ethical dilemmas and led skills sessions for 50 incoming tutors

**Texas 4000 for Cancer, Travel Coordinator and Rider** Oct. 2012 – Aug. 2014

- Fundraised \$5000 to support cancer research at MD Anderson Cancer Center
- Cycled 4500 miles from Austin, Texas to Anchorage, Alaska, providing donation grants to research and treatment centers
- Volunteered more than 50 hours in cancer fighting and cycling communities to spread organization's three pillared mission of Hope, Knowledge, and Charity

## PROJECTS

**Digit Recognition:** Implemented Convolutional Neural Networks in TensorFlow and Keras to classify writing at 99.5% accuracy

**Fast Food Advertising:** Identified new store placement opportunities for an Italian fast food retailer to minimize cannibalization effects. Research conducted in R

**Loan Feature Selection:** Predicted loan default rates at 90% accuracy with boosted random forests

## SKILLS

**Proficient in:** Python, R, Spark, Hive, SQL, Excel, GAMS, AMPL, Tableau, Unix, AWS

**Libraries:** Numpy, Pandas, Scikit-learn, TensorFlow, Keras

**Frameworks:** A/B testing, Machine Learning, ETL, Map Reduce