# VIKTOR SHAUMANN

Berkeley, CA • (818) 455-7038 • viktor.shaumann@gmail.com • GitHub: vshaumann • LinkedIn: viktorshaumann

### **EDUCATION**

#### UNIVERSITY OF SAN FRANCISCO

Master of Science in Analytics

San Francisco, CA

Jul 2016

 Academics: Machine Learning, Distributed Computing, Relational & NoSQL Databases, Design of Experiments, Web Analytics, Advanced Data Visualization, Linear Regression, Multivariate Statistics, Time Series, Data Acquisition, Business Strategies for Big Data, Computation for Analytics and Exploratory Data Analysis

#### UNIVERSITY OF CALIFORNIA, SAN DIEGO

San Diego, CA

Mar 2013

Bachelor of Arts in Economics, Minors in Business and Accounting

• *Academics*: Econometrics, Linear Algebra, Python Programming, Micro & Macro Economics, Calculus for Science & Engineering, Business Strategy, Project Management, Product Marketing, Organizational Leadership and Enterprise Finance

#### **EXPERIENCE**

AT&T

Data Scientist Intern

San Francisco, CA Nov 2015 – Present

- Designed and implemented a distributed and parallelizable community detection algorithm on the AT&T to AT&T call network
- Developed statistical validation procedures and performed hypothesis testing for graph models
- Processed over 100 billion of raw records using Pig and Python UDFs into directed and undirected network graphs
- Performed EDA and calculated self-defined historical customer churn metrics using Hive SQL
- Utilized Agile methodology to plan deliverables, created documentation and communicated results to the stakeholders

## **BDO CONSULTING - BUSINESS ANALYTICS GROUP**

Los Angeles, CA May 2013 – Jun 2015

Analyst

- Designed integrated financial models to value entities, complex financial securities, intangible and fixed assets
- Analyses included discounted cash flow analysis, option pricing model (Black-Scholes) and Monte Carlo simulations
- Identified patterns and trends in financial and operational data, performed company, industry and economic research
- Valued over 50 venture capital backed leading technology start-ups in the Silicon Valley and San Francisco
- Experienced in internet, software, technology, media, semiconductor, consumer products and pharmaceuticals industries

#### **TECHNICAL SKILLS**

- Languages: Python, R, SQL, NoSQL (PostgreSQL, MongoDB, Apache Drill)
- Big Data: pySpark, Pig, Hive
- Visualization: ggplot2 (R), matplotlib, seaborn (Python), D3.js (Javascript)
- Other: Jupyter/IPython Notebook, UNIX, bash, API (YouTube, Yelp, Facebook and Twitter), AWS (EMR, EC2, RDS)
- Business Software: Excel, PowerPoint, Tableau, Rally, Asana

#### **PROJECTS**

- Amazon Review Helpfulness Prediction (2016): Predicted usefulness measure and sentiment based on the context of 4.6 million of reviews. Feature extraction with Word2vec, modeling with Logistic Regression and Random Forest. Application built in Flask
- Kaggle What's Cooking? (2016): Achieved 77.0% accuracy (vs. 82% first place) with a neural network built using Tensor Flow
- Restful Web Service (2015): Built an analytics web server (EC2) with a Flask backend and PostgreSQL database (RDS). Performed ETL of over 2 million Amazon product reviews
- Time Series Case Study (2015): Forecasted national bankruptcy rates in R by utilizing ARIMA, SARIMA and GARCH models
- Map Reduce Anagrams (2015): Developed a MapReduce algorithm in Python to parse text and identify anagrams using a single-node Hadoop cluster
- YouTube Trend Analysis (2015): Scraped YouTube videos trending worldwide using Python and Google API. Utilized Pandas and PostgreSQL to store and query the data. Visualized the data with Plotly to identify trends and relationships
- Naïve Bayes Sentiment Analysis (2015): Achieved 80% accuracy on a test set. Classified 2,000 movie reviews from polarity data set as positive or negative. Computed probabilities of each class using algorithm written in Python
- Los Angeles Crime Analysis (2014): Identified relationship between violent crimes and temperature by analyzing and visualizing LAPD dataset with 234,151 crime records using IPython Notebook and Pandas