

KATERINA BOSKO, PhD

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GitHub: [k-bosko](#) | LinkedIn: [k-bosko](#) | Portfolio: www.cross-validated.com

SKILLS

Python (pandas, numpy, scikit-learn, nltk, matplotlib, seaborn, etc), SQL, Tableau, R, MS Excel, Machine Learning, Statistics, Git, Command Line, Jupyter Notebook, Google Analytics

WORK EXPERIENCE

Data Science/Customer Analytics

Feb 2018 – present, Self-employed, SF Bay Area

- Developed own website/blog to showcase projects: <http://www.cross-validated.com/> (~400 monthly visitors according to Google Analytics)
- Worked on Customer Behavior, Business Intelligence & Marketing Analytics projects:

Customer Segmentation for a Marketing Campaign

- Applied unsupervised Machine Learning tools (**PCA & K-Means clustering**) to identify target audience for promotional offers in Starbucks Rewards Mobile App;
- Recommended to correct conversion tracking to save **\$70k/mo.**

Customer Analytics for Online Retailer

- Calculated key marketing metrics: monthly **Retention Rates** based on cohort analysis; **RFM Scores** and retention-to-churn based **Customer Lifetime Value (CLV)**.

Tableau Dashboard for Watershed Properties

- Extracted relevant data with **MySQL** queries & created **Tableau dashboard**;
- Recommended to convert 15 residential properties into short-term rentals with forecasted profits of **\$765k/yr.**

Financial Performance Prediction of IPOs

- Scraped, cleaned and merged IPO data from NASDAQ and Yahoo Finance;
- Built predictive models (**Logistic Regression, GradientBoost, RandomForest**) to predict IPO success on its first day of trading. Attained f-beta score that maximizes precision of 0.63 with Logistic Regression (\$38 gains versus \$34 losses with naïve approach).

Research Assistant

Oct 2013 - Jan 2018, University of Bremen, Germany

- Developed high impact research and content of online biweekly digest (["Ukraine-Analysen"](#), 3500+ subscribers)
- Created 400+ data visualizations in Excel
- Collaborated with 100+ researchers worldwide
- Wrote 30+ analytical articles and presented at 25+ public events
- Increased subscription base by 35%

PhD Candidate

Aug 2009 - Sept 2013, University of Bremen, Germany

- Scraped elections data and analyzed it in Excel
- Applied Survival Analysis in R to model turnover of deputy ministers

EDUCATION

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|--|--|
| ▪ PhD in Political Science | University of Bremen (Germany) '17 |
| ▪ MA in International Relations | University of Eichstätt-Ingolstadt (Germany) '09 |
| ▪ BS in Data Analytics for Social Sciences | Khmelnytskyi National University (Ukraine) '07 |

CERTIFICATIONS

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|---------------------------------------|---|
| ▪ SQL for Business Analysts | DataCamp Skills Track '20 (in progress) |
| ▪ Marketing Analytics with Python | DataCamp Skills Track '20 |
| ▪ Digital Marketing | Udacity Nanodegree '20 |
| ▪ Data Scientist | Udacity Nanodegree '19 |
| ▪ Mathematics for Machine Learning | Coursera Specialization '19 |
| ▪ Predictive Analytics for Business | Udacity Nanodegree '18 |
| ▪ Excel to MySQL: Analytic Techniques | Coursera Specialization '18 |
| ▪ Business Foundations | Coursera Specialization '18 |