

MATTHEW SWOGGER|DATA SCIENTIST

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SKILLS

Models:

- Linear Regression, Logistic Regression, Random Forest, SVM, Boosting, K-Means, A/B Testing
- Hierarchical Clustering, KNN, Recommendation Systems, Multi-Armed Bandits, Naive Bayes
- TF-IDF, PCA, ICA, SVD, ARIMA

Programming and Analysis:

- Python: [NumPy, SciPy, Pandas, IPython, Scikit-learn, Statsmodels, NLTK, BeautifulSoup, Psycopg2,
- Pymongo, seaborn]

Databases/Querying:

- SQL [Postgres, MySQL]
- MongoDB

Scalable Data Technologies:

- Spark
- MapReduce

EXPERIENCE

Machine Learning & Data Science Fellow

Apr. 2016 - Jul. 2016

San Francisco, CA

Capstone project: Surge Forecast

- Created an app to forecast surge for ride share drivers five min out. Used ARIMA models at 16 locations across a section of the city, model has 89% accuracy for entire zone.

Other achievements:

- Created credit card fraud detection system
- Built a joke recommender system using matrix factorization for collaborative filtering and content-based filtering to ameliorate cold-start issues
- Implemented churn predictor for ride-sharing company and identified primary factors behind user churn

United States Army 82nd Airborne Division Combat Engineer

Feb. 2003 - Dec. 2005

Fort Bragg, NC

- Deployed 9 months for Operation Iraqi Freedom and Operation Enduring Freedom
- Team leader: responsible for five soldiers daily skill training, daily physical preparedness, and safety allowing them to realize their full potential as Paratroopers
- Managed the radio, the ordinance removal(cache of found weapons and explosives), and the infiltration of buildings in the form of door removal/'door making' for a squad of ten Paratroopers

All Outdoors Raft Guide

May 2008 - Aug. 2012

Lotus, CA

- Managed groups of up to 100 customers as the Raft Trip Leader on Class 4 whitewater on the Middle and South Forks of the American River
- Other duties included Medical Officer, and Swift Water Rescue Officer
- Obtained and maintained EMT, Swift Water Rescue Technician, Wilderness First Responder, and CPR certifications allowing me to deliver the most enjoyable trip while maintaining the utmost safety that you could have on a rafting trip

EDUCATION

B.S. Physics

Dec. 2013

University of Nevada, Reno, NV

A.A. Outdoor Recreation Leadership

Dec. 2008

Feather River College, Quincy, CA

ACTUARIAL EXAMS

Exam Financial Mathematics

Oct. 23 2014

Exam Probability and Statistics

May 14 2015