Scott Knox

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Machine Learning Engineer - Product and customer oriented problem solver with excellent communication skills. I am looking to apply traditional and cutting edge machine learning to understand, solve and deliver value to the most complex business problems.

EXPERIENCE

MINDBODY, San Diego — *Lead Machine Learning Engineer*

Jan 2020 - Present

Focused mainly on consumer facing products, understand current product suite and identify product features that can be improved through the use of AI/ML. As lead engineer of the AI/ML team: Identify relevant data, test hypotheses on feature improvements, develop predictive models, develop, deploy and maintain microservices to expose predictive models as REST APIs to be consumed by our stakeholders. Design system architecture and deployment patterns that must pass automated testing suite. Designed model CI/CD deployment patterns that ensure no down time to APIs while also ensuring the most performant models are deployed on a timely basis.

Solsten, Berlin/Remote — *Senior Data Scientist*

Jan 2019 - Dec 2019

Analyze, cluster and classify psychometric profiles of online games for the purpose of delivering insights on maximizing user experience. Developed a custom metric to guide a complex high dimensionality clustering problem. Created and maintained several predictive models used to power dashboard features used for real time actionable insights for game developers.

Measurabl, San Diego — *Chief Data Scientist*

June 2016 - July 2019

Develop tools, models and data visualizations to discover value in customer data that is relevant, actionable and drive these discoveries from inception to product launch. Developed and deployed an anomaly detection engine that discovered errantly reportant meter data. Developed a robust scoring engine that scored and ranked building energy and water consumption relative to all buildings in our customer data set.

Northrop Grumman, San Diego — *Modeling and Simulation Engineer*

May 2013 - June 2016

Develops, modifies, and runs codes for modeling both mission performance and mission cost. Work on projects includes data analysis, tool creation, and scientific consulting. Developed and run a suite of tools that extracts, transforms and loads hundreds of GBs from several data sources of Unmanned Aircraft flights and produces visualizations that tell the “story” of the flight. Run, develop and maintain a highly complex Monte Carlo model used to generate performance metrics for various aircraft fleet mixes.

PROFILE

Lead Machine Learning Engineer with over 7 years experience and a proven record of delivering solutions to a wide variety of problems. Achievements include designing AI/ML model CI/CD deployment systems, creating regression models used to measure and score commercial real estate energy efficiency. Automated data anomaly detection that reduced time spent by customer success on manual cleaning by 90%. Highly skilled in machine learning, data visualization, ETL and communication.

SKILLS

Python 2/3 - Pandas, Numpy, SciPy, SKLearn, Matplotlib, Seaborn, Flask, PyTest, etc.

Cloud Computing - AWS, GCP

Software/Tools - Kubernetes, Docker, PyCharm, Jupyter, Bash

Deep Learning - PyTorch, TensorFlow

Machine Learning - Regression, Classification, Clustering, Natural Language Processing

Databases - MySQL, PostgreSQL, Snowflake, MongoDB, DynamoDB

Operating Systems - Linux, OSX, Windows

EDUCATION

University of California, San Diego — *MAS Data Science*

Graduated June 2016

Capstone: Restaurant Recommendation Engine

San Diego State University — MS Applied Mathematics

Graduated May 2013

Thesis: Subfield Subcodes of Twisted Codes from Curves

University of California, Santa Barbara — BS Mathematics

Graduated June 2009

Thesis: The Euclidean Reflection Group E8

AWARDS

- Member of the Winning Team of the 2015 SDSU Data Science Competition
- Raymond L. Wilder Award (UCSB)
- Distinction in Major (UCSB)