Scott Knox
email: dueghis <AT> gmail.com

Data Scientist

- Math Software (MATLAB, Magma)
- Python
- Bash
- Regression
- Classification
- Clustering
- Linux
- Algorithm Design and Development
- Statistical Data Modeling
- SQL
- OSX
- Window
- Numerical Modeling and Simulation
- AWS
- GCP

EDUCATION

- Master of Advanced Study, Data Science and Engineering, University of California, San Diego **2016**
  Capstone: "Restaurant Recommendation Engine"
- Master of Science, Applied Mathematics, San Diego State University
  Thesis: "Subfield subcodes of Twisted Codes from Curves" **2013**
- Bachelor of Science, Mathematics, University of California, Santa Barbara
  Thesis: "The Euclidean Reflection Group E_8" **2009**

PROFESSIONAL EXPERIENCE

12traits, San Diego, CA
Senior Data Scientist **2019-Present**
Analyze, cluster and classify individual psychometric profiles of online gamers 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 several features used for real time actionable insights for game developers

Measurabl, San Diego, CA
Chief Data Scientist **2016-2019**
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, CA **2013-2016**
Modeling and Simulation Engineer/Operations Analyst
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

San Diego State University, San Diego, CA **June 2011-December 2013**
Research Assistant
Explored various techniques to produce error correcting codes with optimal correction capability

- Developed algorithms that produced several different classes of error correcting codes
- Discovered several codes with parameters equal to those of the best known linear codes

AWARDS AND MEMBERSHIPS

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