

SARAH M. BURGART

Data Scientist with experience in science, education, customer relations, and consulting.

 github.com/sarahmburgart in [linkedin.com/in/sarahmburgart](https://www.linkedin.com/in/sarahmburgart)  949-257-8061  sburgart@gmail.com

TECHNICAL SKILLS

Languages | Python \ SQL \ HTML **Data Deployment** | PostgreSQL \ MongoDB \ AWS EC2 \ Spark
Libraries | Pandas \ Matplotlib \ Sci-kit-learn \ Tensorflow \ sqlalchemy \ Seaborn \ Statsmodels
Model Creation | Predictive & Inferential Modeling \ Neural Networks \ Machine Learning \ NLP
Data Analysis | Data Visualization \ Statistics (Bayesian & Frequentist) \ AB Testing

PROJECTS

Use of Force Prediction, <https://github.com/SarahMBurgart/use-of-force> | Hosted at: predictingforce.ml

- Merged two datasets from Seattle Police Department on datetime using SQL/sqlalchemy.
- Designed an ensemble model to effectively deal with a 210 (one class) :1 (four classes) imbalance.
- Created a website to return probabilities, levels of force 0-4, from user input. (Average AUC of 0.86)

Technology Used: Python, SQL, Matplotlib, Pandas, Sci-kit-learn, HTML, CSS, JavaScript, Flask, AWS EC2

Temperature Anomalies & Time Series, <https://github.com/SarahMBurgart/temp-anomalies-seattle>

- Hypothesis testing to compare local temperature anomalies to historical temperature anomalies.

Technology Used: Python, Statsmodels, Pandas, Sci-kit-learn, Matplotlib

Fraud Case Study, <https://github.com/SarahMBurgart/fraud-detection-case-study>

- Analyzed data and created a Random Forest Classifier, chosen to weight against missing fraud.
- Locally hosted a simple website to scrape new data and return fraud or not fraud probabilities.

Technology Used: Python, Sci-kit-learn, Pandas, Matplotlib, Flask, NLTK, MongoDB

PROFESSIONAL EXPERIENCE

Adventure Coordinator, Lake Union Charters & Adventures | Seattle, WA | Aug 2017 - Sep 2018

- Guided customers in choosing their adventures, developed experiences, followed up for success.

Communication Trainer / Coach, C & C Communications | Seattle, WA | Mar 2016 - June 2017

- Consultant for businesses and individuals regarding optimizing and establishing communication.

First Mate, Ocean Institute, Call of the Sea | Dana Point, Sausalito, CA | Mar 2014 - Oct 2016

- Taught complex science and physics in educational and public settings (elementary - adult).

Maritime Education Coordinator, Executive Officer, Ocean Institute | Dana Point, CA | Apr 2007 - Mar 2014

- Managed 60 volunteers, 20-30 staff, 3 co-workers, and dozens of community stakeholders.

- Re-designed curriculum & use system for version control optimization and current best practices.

- Trained and coached staff to use appropriate developmental learning levels techniques and vocabulary.

VOLUNTEER EXPERIENCE

Curriculum Coordinator, Consent Academy | Seattle, WA | Aug 2016 - Current

- Develop personalized curriculum and teaching techniques for non-profit, public, and corporate entities.

EDUCATION

Data Science Certificate, Galvanize, Inc. | Seattle, WA | May 2019 - August 2019

E-learning Design & Development Certificate, University of Washington | Seattle, WA | Jan 2016 - July 2016

B.A., Environmental Studies, Prescott College | Phoenix, AZ | Dec 2006