ROBERT REANEY

Security Clearance: **Secret** ◇ robertlreaney@gmail.com ◇ github.com/robertreaney

A lifelong learner passionate about MLOps and the development of reliable ML software. Experienced at digesting stakeholder needs to develop actionable solutions that are efficient and effective.

EXPERIENCE

IntelliBridge *May 2023 - Present*
Data Scientist *Remote, NC*
Responsible for hardening and expanding company data offering to support LLM applications.

- Advocated for graph database technology and deployed end-to-end graph exploration tool after convincing C-suites for support.
- Managed data backend for company's AI/ML commercial solution using Databricks, Github actions, AWS, TerraForm, and spark.
- Reduce response to customer information requests from 1 month to 1 day with automated data pipelines, data modeling, and change data capture.
- Gained responsibility of 2 interns within 2 months of employment to guide projects involving LangChain, Hugging Face, and ML model deployment.
- Championed infrastructure as code and automated testing for data science department.

Anyar, Inc. *October 2020 - May 2023*
Lead Data Scientist *Remote, FL*
Technical lead for data science department and first point of contact for stakeholders. Modeling, simulation, and analysis (MS&A) support for numerous defense related research and development organizations. Served as the sole Subject Matter Expert for data science and machine learning across numerous projects totaling over $20,000,000 in funding.

- Led team of up to 8 across 4 or more simultaneous data science projects.
- Project manager for Graph Neural Network multi-year research efforts with additional funding awards totaling 600k to research fast-running surrogates for finite element methods.
- Created ML test suite to benchmark novel algorithm development.
- Consulted on technical and architectural decisions for multi-million dollar analysis efforts.
- Led business development for company's flagship software.
- Automated analysis pipelines using python, gitlab, Docker, and cloud computing.
- Coordinated scientists, engineers, analysts, and developers to translate design objectives and available metrics into actionable analysis plans and outcomes.
- Developed and delivered presentations and training for audiences of varying technical expertise.

University of Central Florida *August 2018 - May 2020*
Graduate Teaching Assistant *Orlando, FL*
STA 2023 (Statistics I) & STA 4163 (Statistics 2)

Lake Brantley High School *August 2017 - May 2018*
Math Teacher *Altamonte Springs, FL*
Introduced public school to individualized learning programs for at risk students.

EDUCATION

University of Central Florida *August 2018 - May 2020*
Statistical Computing M.S. - Data Mining, GPA: 4.0
Machine learning and statistical theory including unsupervised/supervised learning, Neural Networks, RNNs, CNNs, NLP, Timeseries Forecasting, and Stochastic Processes.

University of Central Florida *January 2015 - August 2017*
Mathematics B.S., GPA: 3.4

PROJECTS

Hydrocode Surrogation
Machine learning approaches for Finite Element surrogation including MPNNs and MeshGraphNets.
Cloud Portfolio
My resume as a deployed product available at https://www.robertreaney.com

PROFESSIONAL EXPOSURE

Languages: Python, Bash, Powershell, R, Julia, SAS, JMP/JSL
Environments: Linux, AWS, Databricks
DevOps: Git, Docker, Singularity, GitHub Actions, Gitlab CI/CD, TerraForm
Back-End: Flask, FastAPI, Nginx, SSL/TLS
Libraries: PyTorch, Tensorflow, PySpark, pandas, Airflow, Prefect, pytest, NetworkX, HuggingFace
Databases: PostgreSQL, MongoDB, Neo4j, Milvus
AWS Stack: S3, EC2, SNS, ECR, Lambda, IAM, Route 53
Documentation: Jupyter, Sphinx, LaTeX, Pluto, Confluence, Jira
Front-End: Plotly/Dash, Streamlit, Matplotlib, NeoDash

RECOGNITION

2022 19th SimTim. Las Vegas, NV. "Large-scale Parallelized Simulation".
2022 90th MORS Symposium. Quantico, VA. "Large-scale Parallelized Simulation".
2022 Digital Engineering Sunmit. Niceville, FL. "Large-scale Parallelized Simulation".
2021 Technical Interchange Meeting. Raleigh, NC.
2021 18th SimTim. Las Vegas, NV. "Distributed Scientific Workflows with SOFA"
2021 89th MORS Symposium. Remote. "Applied UQ for V&V of Simulation Systems"
2020 American Board for Certification of Teacher Excellence - Mathematics Certification
2009 3rd Degree Black Belt, Chun-Kuk-Do