

FORREST MONTGOMERY

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EDUCATION

UNIVERSITY OF LOUISIANA AT LAFAYETTE

Master of Science in Engineering
Design and Control of a Planar Cable
Suspended Parallel Manipulator
August 2017 | Lafayette, LA

UNIVERSITY OF LOUISIANA AT LAFAYETTE

Bachelor of Science in
Mechanical Engineering
Mathematics Minor
May 2015 | Lafayette, LA

CERTIFICATIONS

AMAZON WEB SERVICES

Cloud Practitioner
Solutions Architect - Associate

SKILLS

PROGRAMMING

Python, \LaTeX , MATLAB, Git
Familiar with: C, KAREL, Bash, STM32
Development, MySQL, R

DATA ENGINEERING

PostgreSQL, Redshift, Docker,
Kubernetes, ECS, ECR, Bamboo, Azure
Container Registry
Familiar with: Nginx, Terraform

MACHINE LEARNING

Familiar with: OpenCV, scikit-learn,
mallet, spaCy, gensim

DATA SCIENCE

Pandas, Jupyter Notebooks, Matplotlib,
NumPy, SymPy, SciPy, Tableau, Excel,
Periscope

WEB DEVELOPMENT

HTML, CSS, Sass, Flask, Dash
Familiar with: MQTT Protocol,
Javascript, Ruby, Gatsby, Jekyll

ONLINE COURSES

edx.org
Amazon SageMaker

rmotr.com
Python Data Science

EXPERIENCE

CGI | Senior Consultant, Data Engineer

February 2020 - Present | Lafayette, LA

- Developed Continuous Integration Pipelines for Tendermint blockchain applications.
- Managed Terraform configuration files for AWS resources and connected micro services through API gateway.
- Worked to provide distantly-supervised relation extraction for natural language processing and create interactive social network diagrams.
- Created a Latent Dirichlet Allocation web application utilizing docker and Azure Kubernetes for Topic Visualization for company use.
- Managed Azure Kubernetes clusters, secrets, and Docker Registry for multiple projects.

WAITR | Data Scientist 1

September 2019 - February 2020 | Lafayette, LA

- Developed python scripts to create weekly and daily company reports detailing internal metrics with Excel, Periscope, and Tableau.
- Produced Tableau dashboard on individual market performance to recommend minimum basket sizes, reducing order load on 100s of drivers.
- Investigated promo code abuse and produced report detailing promo code efficiency and user retention.
- Developed ETL processes to merge redshift schemas and integrated HR recruiting data reducing the need for repetitive dashboard queries.
- Analyzed and produced report detailing lost revenue and user retention due to rejected orders.

L3HARRIS | Junior Systems Engineer

October 2018 - September 2019 | Broussard, LA
Active Secret Security Clearance

- Developed vectorized python scripts to query and sum 1000s of vessel transit path metrics reducing computation time by 30 min.
- Cleaned and categorized oil rig location data for determining the metrics of obstacle avoidance decisions.
- Combined marine obstacle and recorded vessel data into Google Earth visualizations and plots to determine mission success.

NOBLE PLASTICS | Design Engineer

December 2017 - October 2018 | Grand Coteau, LA

- Simulated FANUC automation cell in ROBOGUIDE to optimize robot accelerations, reducing the cycle time by 2 seconds and identifying similar points of improvement.
- Retrained Keyence computer vision system by capturing 100s of images, reducing false positive rate and saving customer \$100s in lost material.
- Corrected FANUC teach pendant bugs reducing daily robot downtime.

OTHER EXPERIENCE

HIBOT | Visiting Research Scholar

Summer 2016 | Tokyo, Japan

Developed and tested input shaping control methods to aid in faster full-scale cable robot motions. Analyzed robot vibration dynamics for system identification and fine-tuning of control scheme.