


# JOSEPH WAUGH

 [LinkedIn](#)

 (480) 823-4052

 [joseph.waugh1000@gmail.com](mailto:joseph.waugh1000@gmail.com)

 [Website](#)

 [GitHub](#)

## PROFESSIONAL EXPERIENCE

---

### Data Scientist II

Apr. 2022 - Present

*FedEx Ground*

*Remote, US*

- Leading development of an internal package fraud alerting system using multiple GCP microservices resulting in \$300M+ in revenue savings from customer churn and 100+ internal employee terminations due to theft
- Developed a TensorFlow image classification model for package surcharges, yielding an estimated \$3M in future revenue
- Deployed production changes to improve the FedEx.com estimated delivery date prediction model accuracy by 5%
- Built a TensorFlow image classification model to audit picture proof of delivery images, generating yearly savings of \$2M
- Developed a computer vision learning curriculum and facilitated an internal workshop for 15+ data scientists
- Built 10+ data ingestion jobs with Cron and Cloud Composer for ingestion of IBM AS/400 and DB2 data into BigQuery
- Built 10 different Cloud Logging jobs in Google Cloud Platform to monitor performance of data ingestion scripts
- Built 2 Power BI dashboards to visualize service failure trends for leadership to use in contract negotiations
- **Technology Used:** Python, SQL, Spark, TensorFlow, BigQuery, Cloud Logging, Cron, Cloud Composer, Power BI

### Operations Research, Planning and Analysis Engineer

Jan. 2021 - Apr. 2022

*FedEx Ground*

*Remote, US*

- Created a Python library to process internal forecast data for a \$1.2B+ capex optimization research initiative
- Built capex spend analysis for \$300M facility upgrades with 100% approval rate from executive stakeholders
- **Technology Used:** Python, SQL, Spark, Vertex AI, BigQuery, Pandas, NumPy

### Process Engineer

Jun. 2019 - Dec. 2020

*State Farm*

*Tempe, AZ*

- Led A/B testing and statistical inference for new telematics products, resulting in a 5% lift for detection of crash events
- Built a Power BI dashboard to highlight headcount trends for claims leadership to understand attrition patterns
- **Technology Used:** Python, R, SQL, Power BI, Hadoop, Spark, Facebook Prophet

## VOLUNTEERING

---

### Machine Learning Mentor

Jul. 2023 - Present

*Freelance*

*Remote, US*

- Worked with 8+ mentees on building technical skillsets (i.e., Python, SQL, Tableau) for placement into data science jobs
- Assisted a mentee to fine-tune a stable diffusion generative AI PyTorch model for an open-source image generation tool
- Co-built a LLM using transfer learning and other NLP approaches in TensorFlow with a mentee

## TECHNICAL SKILLS

---

- **Programming Languages:** Python, SQL, R
- **Big Data Technologies & Frameworks:** Airflow, Spark, PyTorch, TensorFlow, Keras, NLP, MLFlow
- **Other Tools and Technologies:** Tableau, Power BI, Google Cloud, Azure, GPU Training

## EDUCATION

---

### Master of Science, Computer Science

Jan. 2020 - Dec. 2022

*College of Computing, Georgia Institute of Technology*

*Remote, US*

### Bachelor of Science, Business Data Analytics

Aug. 2017 - Jul. 2019

*W.P. Carey School of Business, Arizona State University*

*Tempe, AZ*