JOSEPH WAUGH

in [LinkedIn](#)   ✆ (480) 823-4052   ✉ joseph.waugh100@gmail.com   🌐 [Website](#)   ⚡ [GitHub](#)

PROFESSIONAL EXPERIENCE

Sr. Machine Learning Engineer   Jun. 2024 - Present
ThredUp   *Scottsdale, AZ*

- Developing and deploying computer vision models to automate garment measurements for ThredUp's inventory, reducing annual labor costs by $1M+, and supported measurement-related product development
- Developing and deploying automated landmarking computer vision models for various proprietary internal use cases
- **Technology Used**: Python, SQL, Spark, AWS, OpenCV, Jenkins (CI/CD), RabbitMQ, ArgoCD, Jenkins, Rollbar

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
- **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
- **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

TECHNICAL SKILLS

- **Programming Languages:** Python, SQL, R, HTML,
- **Big Data Technologies & Frameworks:** Airflow, Spark, TensorFlow, RabbitMQ, Kubernetes, Jenkins
- **Other Tools and Technologies:** Tableau, Power BI, Google Cloud, Azure, AWS

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*