

# Aidan Draper

SOFTWARE ENGINEER, DATA

✉ adraper19@gmail.com | 🏠 aidandraper.com | 🌐 adraper2 | 📧 adraper19 | in aidan-draper

## Experience

### Restaurant365

2023 - Present

DATA ENGINEER (R&D)

New York, NY (Remote)

- Currently working multi-functionally building cloud infrastructure, modelling a centralized data model, building + demoing ML in the product, and producing product exploratory data analysis (EDA) for the Product Marketing team.
- Pairing with two Software Architects to **build and deploy machine learning (ML) models and infrastructure for the first ML software feature offerings** in the R365 product. Demoing how hand-built Tensorflow models in Vertex AI could serve 4,000 customer instances.
- **Creating and improving automated processes to support SOX compliance for IPO-readiness**, including mapping Sales customer accounts with billing software accounts to correct financial reporting of usage and recurring revenue, especially sold bookings verses billing collections.
- As team hire #1, **launched a new cloud warehouse in GCP and BigQuery with a centralized data model** supported by Fivetran and dbt. Assisted by, and partnered with, teammates across InfoSec, Devops, IT, and an off-shore team of 8 contractors.

### WeWork

June 2022 - January 2023

DATA ENGINEER (People)

New York, NY (Hybrid)

- Led the decision, design and process of deprecating a single Airflow EC2 instance for a Docker and ECS microservices architecture that horizontally and vertically scales to **improve ELT task concurrency and reduce monthly server cost by roughly 30% by less resource idling**.
- Caught, corrected, and informed downstream stakeholders of critical bugs, including **the overcounting of headcount by 3% and salary run rate by a few million dollars**, due to outdated business logic in dbt report models being run in weekly emails sent to executives.
- **Architected and delivered a continuous integration and deployment (CI/CD) pipeline** in GitHub Actions for our Airflow + dbt code repository, while creating merge request guidelines and code documentation for team readability, onboarding, and SOC 2 compliance.
- **Refactored a Snowflake data mart in dbt to better fit the current need and business logic** of the People Team divisions: Recruiting, Learning, Diversity/Inclusion, Legal, and Compensation, using internal app, Greenhouse, Workday, Salesforce and Shareworks data.
- **Uplevelled current code development processes** by introducing a deployment workflow lifecycle with test coverage expectations, a PEP8 code formatter/linter, and package vulnerability checks while improving DAG and dbt test coverage as well as Slack alerts for workflow failures.

### Pathstream (Series A Startup)

June 2021 - May 2022

SOFTWARE ENGINEER, DATA (R&D)

New York, NY (Remote)

- Collaborated in a team of 4 to **deploy a custom OLAP and REST client in Django in just 3 months** that handles tasks such as data warehousing, table denormalization, and syncing product data with enterprise app data. See <https://gitlab.com/frame-00/00-api>.
- **Built ETL pipelines from scratch in Python using Airflow** from sources such as paid media platforms (TikTok, Facebook, Google) and student product data from an in-house Ruby on Rails app. Revised existing pipeline tests to improve coverage.
- Migrated Airflow operators to send data to a warehousing client. Created custom queries in a Postgres DB with Django dunder methods.
- **Designed and maintained SLAs by meeting with non-technical stakeholders**, and monitoring logs on DataDog and Airflow.
- Authored and reviewed technical content for data analytics courses as well as documentation for our data engineering repositories.

### University of Notre Dame

June 2019 - June 2021

COMPUTER VISION RESEARCH ASSISTANT (PhD Student)

Notre Dame, IN (On Site)

- Studied the effectiveness of transfer-learned depth estimation neural networks for improving matching scores of 3D to 2D fingerprint images.

## Skills

**Languages** Proficient: [Python, SQL, JavaScript, Bash, R] Exposure: [Rust, Ruby, C++, Java, Lua]

**Libraries** Airflow, dbt, Django, React, py: [Snappy/pyarrow, pytest, factory, Tensorflow, PyTorch, opencv, Pandas, NumPy], some Rails

**Tools** Snowflake, BigQuery, Postgres, Fivetran, Redis, Git, Github Actions, Gitlab CI/CD, Codecov, JIRA, Notion, Tableau

**GCP:** [Compute, Cloud Composer, Vertex AI, IAM] **AWS:** [ECS, EC2, ECR, RDS, S3, Cloudwatch, VPC, IAM, Route 53, Cloudfront]

## Education

### University of Notre Dame

June 2019 - June 2021

GRADUATE COURSEWORK IN COMPUTER SCIENCE, ADVISED BY DR. ADAM CZAJKA

Notre Dame, IN

### Elon University

May 2019

BS IN COMPUTER SCIENCE, BS IN STATISTICS

Elon, NC

## Competitions

### Manhattan College Business Analytics Competition

May 2018

BEST POSTER AWARD FOR INTERPRETING NYC SMALL BUSINESS CONTRACT SPEND AND ALLOCATION DATA.

New York, NY

### Champion Analytics Case Competition

October 2017

1ST PLACE OUT OF 20 TEAMS IN ANALYZING CHAMPION'S PRODUCT CONSUMER REVIEWS.

Burlington, NC