

# Frank Kovacs

[frkovacs@outlook.com](mailto:frkovacs@outlook.com) | [frank-kovacs.net](http://frank-kovacs.net) | Hoboken, NJ

## Summary

I am an experienced software engineer with a background in data science, data engineering and artificial intelligence seeking a senior-level engineering or team lead position. I pride myself on delivering value to teams by creating novel solutions and implementing novel patterns to solve problems. I consistently delivered value by bridging the gap between technical and non-technical stakeholders to make data work for you.

## Professional Experience

### Axis Group

Berkeley Heights, NJ

#### Senior Data Engineer

July 2024 – July 2025

- Led hands-on development for client projects that provided \$80M in client value
- Served as both a chief data architect and data ops architect for 3 high-impact client engagements
- Cultivated strong client relationships by translating difficult statistical concepts into understandable language
- Acted as an internal subject matter expert for Spark, Python, R, Scala and open-source tooling

#### Data Engineer

April 2022 – July 2024

- Owned and optimized key components within broader data architectures for both clients and internal teams
- Reduced compute costs for clients by an average of 35% for processing hundreds of gigabytes of daily data
- Created a client documentation system for external, non-technical personas

#### Associate Data Engineer

September 2021 – April 2022

## Projects

### Modernization of Fortune 500 Inventory Management System (Axis – Lead Engineer, Architect)

- Created visibility into \$67M worth of franchise inventory across 500 locations worldwide
- Identified and documented inefficiencies that led to client savings of \$20M annually
- Created modern data platform leveraging CrunchTime and internal legacy data infrastructure

### Unsupervised Anomaly Detection at Fortune 500 (Axis – Lead Engineer, Lead Data Scientist)

- Modeled two years of transaction data to create anomaly detection processes for use by Loss Prevention
- Led user interviews and incorporated results into comprehensive feature engineering process
- Implemented model training, validation, data preparation and deployment

### 605 ETL Engine (Axis, Developer)

- Created a custom Scala ETL engine to run daily data processing for hundreds of gigabytes of media data
- Created python orchestrator to trigger jobs ad-hoc and daily executions

### ISLE (CMU – Developer, Designer and Tester)

- Collaborated with a PhD student to create a web-based interactive learning solution in use by 1/6<sup>th</sup> of the students

## Education

### Carnegie Mellon University

Pittsburgh, Pennsylvania

#### Masters of Statistical Practice

May 2021

- Graduate Teaching Assistant of the Year 2021
- Research: *An Examination of Interrupted Time Series to Quantify the Effectiveness of Covid-19 Preventative Mandates* with Dr. Alex Reinhart

#### Bachelor of Science, Statistics & Machine Learning

August 2019

- Meeting of the Minds Undergraduate Research First Place 2018
- Undergraduate Teaching Assistant of the Year 2018

### Seton Hall Preparatory School

West Orange, New Jersey

#### High School Diploma

June 2015

## Skills

- |           |                           |                           |
|-----------|---------------------------|---------------------------|
| • Python  | • Machine Learning        | • CI / CD: Git, BitBucket |
| • R       | • Artificial Intelligence | • Spark                   |
| • PyTorch | • Scala                   | • AWS , Azure             |