

# Thomas Tarler

## WORK EXPERIENCE

JANUARY 2022 - PRESENT

Sr. Data Scientist, DCCA

*Board of Governors of the Federal Reserve*

Part-time rotation focused on proactively identifying potential risks to consumer financial health and working with policy makers (congress, Board of Governors) to help mitigate.

Sr. Data Scientist, FedNow

*Federal Reserve Bank of Boston*

Designer and architect behind the first AI systems for fraud detection on the FedNow Service

- Created, compiled, and executed on a five year plan to build a fraud score to be used in real-time transaction screening for the FedNow Service.
- Curated distinct fraud attack scenarios and designed controls that enabled all US banks to prevent fraud at their risk tolerance
- Catalyzed innovation through teams, brainstorming, education sessions, and other items to lead the first AI services ever deployed by the US Central Bank on \$iT+ in transactions

AUGUST- 2018 - DECEMBER 2021

Chief Data Scientist, Atlanta

*TSYS, a Global Payments Company*

Created first Data Science team and overall Research and Development program within TSYS. Primary focus is in Fraud & Risk with mandate to develop into other portfolio areas.

- Championed and developed new products in the fraud and risk space which have created \$10M+ USD in net new revenue to the 2022 sales pipeline
- Established program, team, and platform for rapid data science innovation Retooled for a consulting service with potential \$2M annual run rate.
- Assisted in managing the TSYS Foresight Score as the primary data scientist advisor - established MRM/SRM-7 practices and grew program from three client banks to over twenty clients and \$50M+ revenues
- Designed and constructed the TSYS R&D Data Lake at a total cost of \$300K - by far the single most efficient asset in TSYS history with \$2.5M USD in realized income

## PUBLICATIONS

2019 **"Methods, Systems, and Apparatuses for improved fraud detection and reduction" U.S. Pat. US 2021/0042824A1<sup>a</sup>**  
USPTO

<sup>a</sup><https://patents.google.com/patent/US20210042824A1>

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## SUMMARY

A top data scientist in banking and payments with experience in acquiring and issuing and an expert in fraud and real time authorizations and expertise in the FedNow real time payments service. I regularly transform limited budgets and informal influence into tightly focused projects with very large ROI. Skilled communicator, seller, leader, and visionary - I build teams, platforms, and processes for success in Artificial Intelligence.

## EDUCATION

2011 - 2015

**Bachelor of Arts**

With Distinction and Cum Laude

MATHEMATICS AND ECONOMICS

*University of Denver*

2017 - 2020

**Master of Science**

DATA SCIENCE, WITH HONORS

*Regis University*

## MAJOR PROJECTS

FedNow Advanced Fraud Mitigation	Lead on developing an ML-based fraud score for FedNow - oriented towards our 8000+ different financial institutions from the very small to very large. Designed and implemented TSYS Data Science Platform, our first and only prototyping platform to enable rapid product testing and refinement.
TSYS Data Science Platform	

## TECHNICAL SKILLS

Techniques	Machine learning, Deep Reinforcement Learning, DevOps, Agile, financial forecasting, reinforcement/policy learning, data visualization, data wrangling, anomaly detection, data mining, event streaming, risk estimation and optimization
Technology	SQL, PYTHON, R, Tableau, Hadoop, Spark, big data, mainframes, non-stop systems, ERP