Jonathan Alistair Jayes

Data Scientist

Based in Lund, Sweden

A mission-driven Data Scientist with a PhD in Economic History and 4 years of experience building the robust data infrastructure that underpins critical analysis. Known for developing end-to-end automated pipelines and sophisticated AI/RAG systems that transform disparate public-sector data into reliable, structured assets. Seeking to apply my expertise in data science and economic analysis to drive impactful projects in a dynamic team environment.

Work Experience _____

Codera Analytics Lund, Sweden

Full Stack Data Scientist 2022 - Present

Led various data science projects, including managing clients and overseeing a team of three

- Led the development and successful testing of an Al-powered end-to-end solution in ML to automate data extraction from diverse corporate reports, reducing manual processing time by ~80%
- Managed the complete lifecycle of a large-scale public finance data project for Africa, from successful bid to delivery of a structured dataset covering 2,700+ documents
- Developed and implemented an SDMX-compliant ingestion pipeline for South African Reserve Bank (SARB) and National Treasury financial statistics, utilising Python for ETL processes and SQL for rigorous data validation, ultimately making key verified datasets publicly available on the Codera Analytics platform.
- Engineered a scalable data pipeline incorporating >60 web scrapers and robust database architecture to systematically collect, process, and store complex public finance documents in Africa

Fathom Data Lund, Sweden

Junior Data Scientist Summer 2022

Developed a data product analyzing scraped consumer pricing trends

• Developed an automated reporting pipeline using SQL and R to analyze consumer pricing trends from scraped web data, generating insights that informed commercial strategy and identification of potential client segments for marketing outreach

Education __

PhD in Economic History

Lund University

Planning to defend my thesis in October 2025.

2021 - 2025

- Designed and implemented a novel AI pipeline automating the extraction and structuring of data from historical biographical dictionaries, reducing manual transcription time by 3 months
- Applied Natural Language Processing (NLP) techniques for analyzing biographical dictionary data to study skilled labor origins and career trajectories.
- Compiled and processed large-scale historical datasets, involving digitization, data cleaning, geocoding, and the use of classification schemes (HISCO, HISCLASS) for occupational data.
- Taught a course on Stata skills and map making

Masters in Economics

Stellenbosch University

Graduated with distinction.

2020 - 2021

Honours in Economics and Bachelors in Social Science

Dean's Merit List. Top mark in my year for four courses.

University of Cape Town

2015 - 2018

Skills ___

Technical Skills

- Data Analysis and Econometrics: Python (Pandas, Polars, scikit-learn), R (tidyverse, tidymodels), Advanced Excel, SQL, Stata
- Machine Learning & Al: Statistical Analysis, Predictive Modeling, NLP, LLM APIs (OpenAl, Gemini, Claude), scikit-learn
- Cloud & Automation: AWS (Lambda), Google Cloud (Functions), Git, GitHub Actions (CI/CD)
- Currently improving: Docker for containerization, and TypeScript for web development

Languages

English (native), Swedish (B2), French (A2).

Interests

Running, Geoguessr, and international trade.