

Babäk Firoozi Fooladi

[LinkedIn](#) | [GitHub](#) | [StackOverFlow](#)

Location: Espoo, Uusimaa, Finland

Email: contact@babakfi.fo | Mobile: +358 46 521 2019

Data Analytics Engineer | GIS Developer | Data Scientist

Proactive and adaptable problem-solver with a solid foundation in spatial data, econometrics, and data science. Skilled in developing analytical solutions and insights, with hands-on experience in data processing, visualization, databases, and data pipelines. Eager to leverage a self-driven attitude and commitment to quality to take ownership of projects and contribute to team goals.

Technical Skills

Python: ●●●○○	R: ●●●●○	Julia: ●●○○○	SQL: ●●●○○
AZURE: ●●○○○	Econometric: ●●●●○	Data Viz.: ●●●●●	Spatial data: ●●●●●
PostgreSQL: ●●●○○	SQLite: ●●●○○	DuckDB: ●●●●○	MongoDB: ●●○○○
Data Analysis: ●●●●○	ArcGIS: ●●●○○	QGIS: ●●●●○	Excel: ●●●●○
PowerPoint: ●●●●○	RAG: ●●○○○	CAG: ●●●○○	Git: ●●●●○

Experience

DATA ANALYTIC ENGINEERING

Self-Employed | Apex-Heat

Jan 2025 – Present

Self-Employed – Espoo, Finland

- Resolving **technical debt**.
- Consulting the implementation of **Generative AI**.
- Migrating from **Pandas** to **Polars** to improve the efficiency and calculation time.
- Improving the design pattern, and **writing documentations**.
- Adjusting an improving data processing test coverage and **testing** methods.
- Optimising** the SQL queries to improve response time.

Ph.D. Candidate

Aalto University

Sep 2020 – Present

Part-time – Espoo, Finland

- Processing HTML and PDF files and implementing **RAG** to extract structured data from the land use plan documents.
- Applying Econometric, ML and data analysis for **quantitative research**.
- Designed and deployed database in PostgreSQL and DuckDB data lake for research data in our team.
- Preparing and updating visualisations for lecture and presentation.
- Preparing the providing research data for researchers.
- Deploying and maintaining **AZURE functions** to store real estate data for research.
- Self-taught programming skills, and further obtained formal education in data science.

Data Analytics Engineer

Qissa kaupunkisuunnitteluanalytiikka Oy

Sep 2020 – Dec 2024

Part-time – Espoo, Finland

- Designing data pipeline to gather data form REST APIs, cleaning, Geo-coding and storing in accordance to the specifications requested by clients
- Creating Spatial data dashboard for spatial network analysis back-end. The analysis used HSL, HERE and HSY APIs to gather and process the data and perform network analysis.

Planning Assistant

WSP Finland Oy

Nov 2018 – Jun 2021

Part-time – Helsinki, Finland

- Performing Spatial Data analysis, Processing and storing spatial.
- Performing network analysis for pedestrian route choice forecast. The analysis was fine tuned to existing situation, and then used to forecast pedestrian flow after urban development
- Preparing analysis, graphs, maps and data visualisations for stakeholders, projects managers and clients.

- Providing GIS analysis to transport engineers, landscape designers, urban planners and architects.
- Programming and producing dynamic 3D model of the cities using ESRI CityEngine

GIS Operator

University of Tehran

Aug 2015 – May 2016

Part-time, Tehran, Iran

- Gathering, processing and preparing GIS data for urban designers to implement and test new directives for urban design in Tehran City

Chief Operating Officer

Airsa Dorsa Industries

Aug 2011 – Aug 2018

Full-time, Karaj, Iran

- Accounting, cost calculation, financial analysis, human resources and BI
- Provided in house graphic design, CAD and technical solutions for clients.
- Negotiating with the clients regarding their designs, pricing and production.
- Admin duties, supervision duties, high-frequency welding, silk screen printing.

Education

Aalto University

Doctor of Philosophy in Technology, Real Estate Economics

Espoo, Finland

Sep 2020 - Present

Aalto University

MSc. (Tech.) Urban Studies and Planning in Real Estate Economics

Espoo, Finland

Sep 2018 - Jul 2020

Aalto University

BA. Town Planning

Espoo, Finland

Sep 2011 - Jun 2015

Volunteer Work

- DataTribe collective moderator, contributor
- Helsinki Data Week volunteer