# Babäk Firoozi Fooladi

LinkedIn | GitHub | StackOverFlow

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## 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**

R: 00000
Econometric: 00000
SQLite: 00000
ArcGIS: 000000
PowerBI: 000000

Julia: ••••

Data Viz.: ••••

DuckDB: ••••

QGIS: ••••

Tableau: ••••

## **Experience**

#### **DATA ANALYTIC ENGINEERING**

Self-Employed | Apex-Heat

Jan 2025 – Present Self-Employed – Espoo, Finland

- Resolving technical debt.
- 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

Sep 2020 – Present Part-time – Espoo, Finland

**Aalto University** 

- 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.
- Processing HTML and PDF files and implementing RAG to extract structured data from the land use plan documents.
- 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** 

Sep 2020 – Dec 2024 Part-time – Espoo, Finland

Qissa kaupunkisuunnitteluanalytiikka Oy

- 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** 

Nov 2018 – Jun 2021 Part-time – Helsinki, Finland

WSP Finland Oy

- 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** 

Aug 2011 – Aug 2018 Full-time, Karaj, Iran

Airsa Dorsa Industries

- 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

Espoo, Finland
Doctor of Philosophy in Technology, Real Estate Economics

Sep 2020 - Present

Aalto University

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

Sep 2018 - Jul 2020

Aalto University

Espoo, Finland
BA. Town Planning

Sep 2011 - Jun 2015

#### **Volunteer Work**

- DataTribe collective moderator, contributor
- Helsinki Data Week volunteer