Babäk Firoozi Fooladi

LinkedIn | GitHub | StackOverFlow

Location: Espoo, Uusimaa, Finland
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DATA ANALYTICS ENGINEER | GIS DEVELOPER | DATA SCIENTIST

A versatile and proactive problem solver with a strong ability to quickly adapt and learn new skills. I possess a solid foundation in spatial data, GIS, econometrics, statistics, and data science, complemented by expanding expertise in data processing and visualisation. I excel at developing analytical solutions and insights for challenges of varying complexity. I am seeking opportunities to further develop and enhance my skills in data engineering and data science.

TECHNICAL SKILLS

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

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
Aalto University

Sep 2020 – Present
Part-time – Espoo, Finland

- Applying Econometric, ML and data analysis for **quantitative research**.
- Modelling and implementing data pipeline to gather and store the research data.
- 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.
- Providing consultancy, training and lecturing services for data analysis, GIS and research at Aalto university.

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
- 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

<div align="right">Aug 2015 – May 2016</div>

University of Tehran

<div align="right">*Part-time, Tehran, Iran*</div>

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

Chief Operating Officer

<div align="right">Aug 2011 – Aug 2018</div>

Airsa Dorsa Industries

<div align="right">*Full-time, Karaj, Iran*</div>

- 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

<div align="right">Espoo, Finland</div>

Doctor of Philosophy in Technology, Real Estate Economics

<div align="right">*Sep 2020 - Present*</div>

Aalto University

<div align="right">Espoo, Finland</div>

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

<div align="right">*Sep 2018 - Jul 2020*</div>

Aalto University

<div align="right">Espoo, Finland</div>

BA. Town Planning

<div align="right">*Sep 2011 - Jun 2015*</div>

VOLUNTEER WORK

- DataTribe collective moderator, contributor
- Helsinki Data Week volunteer