Matin Forutan

Geospatial engineer · PhD applicant

Contact: see https://gis.alietedal.ir/cv

I am a geospatial engineer with B.Sc. and M.Sc. degrees from K. N. Toosi University of Technology, ranked first in both (B.Sc. GPA 17.03/20, M.Sc. GPA 19.11/20). My M.Sc. thesis on mineral potential mapping with GIS and neural networks led to an ISI-indexed paper, and a related paper received a Best Student Paper Award. I have 16 years of experience in energy and GIS in Iran's national gas industry, including as project coordinator of IGN, a platform for gas network analysis used by 10,000 users in 21 regional companies, and as head of the GIS department. IGN's Web GIS also offered semantic voice search in Persian and English. In my last role, my team built a data model for all pipeline design data, including environmental data. PMP-certified. I recently relocated to Italy and am seeking a PhD position in geomatics and GIS, focused on web GIS and open geospatial platforms, and how spatial data from multiple sources can be integrated and made easier to use.

Experience

Head of GIS Department, Iranian Gas Engineering and Development Company (Oct. 2023 – Aug. 2026). Led a five-person team that set the roadmap for preparing pipeline as-built maps and moving the company toward the IGN enterprise GIS.

GIS Project Coordinator, National Iranian Gas Company (Aug. 2021 – Oct. 2023). Managed IGN, an enterprise GIS platform and decision support system for gas network data (10,000 users, 21 regional companies).

GIS Senior Data and Business Analyst, NIGC (Jun. 2018 – Aug. 2021). Planned the feasibility and development of two software platforms (IGN and GPNET) and specified their requirements.

Senior GIS Specialist, NIGC (May 2014 – Jun. 2018). Designed spatial databases and administered ArcGIS Server / ArcGIS Pro.

GIS & IT Researcher and Specialist, NIGC (Feb. 2012 – May 2014). Led a feasibility study benchmarking proprietary GIS platforms against GeoServer, QGIS and PostGIS.

Business and Data Analyst, Parsineh Tarhe Aatieh Company (Mar. 2010 – Feb. 2012). Coordinated the Web GIS project for agricultural beneficiaries of Golestan Province.

Graduate Research Assistant, KNTU (Sep. 2008 – Mar. 2010). Member of a KNTU research team for the assessment, feasibility study, design and implementation of GIS.

Education

M.Sc. in Geospatial Information Systems (GIS), K. N. Toosi University of Technology (KNTU), Tehran, Iran, 2007 – 2009, GPA 19.11/20

B.Sc. in Geomatics Engineering, K. N. Toosi University of Technology, Tehran, Iran, 2003 – 2007, GPA 17.03/20

Publications

Forutan, M. and Mansourian, A. and ZareiNejad, M. and Sahebi, M. R., 2011. Comparing the performance of MLP, RBF, PNN and GRNN neural networks for determining boreholes of porphyry copper in GIS. Geosciences Scientific Quarterly Journal.

Mehrmanesh, A. and Sahebi, M. and Valadan, M. and Forutan, M. and Soltani, M., 2013. Determining the optimum position of boreholes using Hyperion image and neural networks method. Journal of Geospatial Information Technology (JGIT).

Forutan, M. and Mehrmanesh, A. and Mansourian, A. and Sahebi, M. and Valadan, M., 2010. Determination of optimum mineral zones using artificial neural networks. Geomatics 89 Conference and Exhibition, Iranian National Cartographic Center (NCC).

Vahidnia, M. H. and Alesheikh, A. and Forutan, M., 2009. Site selection of optimum fire station using artificial neural networks. Geomatics 88 Conference and Exhibition, Iranian National Cartographic Center (NCC).

Mohammadi, N. and Malek, M. R. and Forutan, M., 2008. An architecture for navigating vehicles for urban services. Geomatics 87 Conference and Exhibition, Iranian National Cartographic Center (NCC).

Mohammadi, N. and Alesheikh, A. and Forutan, M., 2008. The application of GA in shortest path finding using weighted parameters. Geomatics 87 Conference and Exhibition, Iranian National Cartographic Center (NCC).

References available on request.