Professional Profile

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Summary

Artificial Intelligence Specialist with a strong focus on **Data Science** and **Data Analysis**, complemented by deep expertise in Geographic Information Systems **(GIS)** and Remote Sensing **(RS)**.
I hold academic degrees in **Surveying Engineering** (with a major in **Photogrammetry**) and **Natural Resources Engineering** (**Forestry** and Forest Engineering).
Possesses diverse experience in project management, research and development, and has contributed to academia through university-level teaching.
Author of several specialized scientific books and holder of multiple registered patents in technical and scientific fields.

Education

University of Tehran
Master's Degree in Geomatics (Mapping) Engineering
September 2010 – (Thesis not completed)
Focus on photogrammetry, surveying systems, and geospatial data analysis.

University of Agricultural Sciences and Natural Resources, Gorgan
Master's Degree in Forest Engineering
September 2005 – March 2008
Specialized in sustainable forest management, forest inventory, and ecological research.

Lorestan University
Bachelor's Degree in Natural Resources Engineering – Forestry
September 2000 – July 2004
Focused on forestry sciences, natural resource management, and field research.

Skills

AI Specialist – Data Science and Data Analysis
Skilled in data science and artificial intelligence with experience in machine learning and data-driven decision-making. Proficient in developing models for pattern recognition, prediction, and classification using Python and R. Hands-on experience in big data processing and visualization techniques.

Key Tools & Technologies:

- **Python**: NumPy, Pandas, Scikit-learn, TensorFlow, Matplotlib
- **R Programming**: Data analysis, statistical modeling, ggplot2
- **Excel**: Advanced formulas, pivot tables, data visualization

GIS Specialist – Geographic Information Systems
Proficient in GIS applications for spatial analysis, map creation, and data management. Able to perform geospatial

queries, spatial data visualization, and site analysis using modern GIS software.

Key Software:

- **ArcGIS**
- **QGIS**
- **AutoCAD Map 3D**
- **Global Mapper**

Remote Sensing Analyst (RS)

Experienced in processing satellite imagery and aerial photography for land cover classification, change detection, and environmental monitoring.

Key Software:

- **PCI Geomatica**
- **ERDAS Imagine**
- **ENVI**

Data Analysis Expert

Strong background in data preprocessing, statistical analysis, and interpretation of complex datasets. Capable of transforming raw data into meaningful insights to support business and engineering decisions.

Skills & Tools:

- **Excel** (including data visualization and dashboards)
- **Python** (for automation and advanced data processing)
- **R Programming** (for statistical analysis and reporting)

Weigh-In-Motion (WIM) Systems Expert

Expert in planning, site selection, and installation of WIM systems for highway traffic monitoring. Experienced in calibration, data analysis, and integration with transportation systems.

Specialized Areas:

- Site analysis for WIM sensor placement
- Data processing
- Integration with traffic monitoring platforms
- Collaboration with transportation authorities

Survey Engineer

Professional experience in land and topographic surveying, using modern equipment and software for accurate data collection and mapping. Knowledge of geodesy, GPS, and CAD-based mapping.

Tools Used:

- **Total Stations, GNSS Receivers**
- **AutoCAD Civil 3D**
- **Land Survey Software**

Forest Engineer – Forest Management

Background in sustainable forest planning, inventory, and conservation practices. Knowledge of silviculture, remote sensing for forest health monitoring, and GIS applications in forestry.

Project Management & Research

- R&D Project Design and Execution
- Technical Documentation and Reporting
- Academic Teaching & Curriculum Development
- Cross-functional Team Coordination

Patents & Publications

- Multiple Registered Patents in Engineering Applications
- Author of Several Scientific and Technical Books

Certificates & Training

Artificial Intelligence Specialist

Completed comprehensive courses in Artificial Intelligence, including an AI Product Management program focused on real-world applications and deployment of AI solutions.

Data Science Certifications

Completed both introductory and advanced courses in data science and modeling, covering statistical analysis, machine learning, and data-driven decision-making.

Python Programming Certifications

Completed a full series of Python programming courses, from beginner to advanced levels, with a focus on data analysis, automation, and application development.

Image Processing & Machine Vision

Obtained official certification in image processing and machine vision, with hands-on experience in digital image analysis and object recognition.

GIS Certification & Experience

Completed professional training in ArcGIS with several years of work experience and teaching in Geographic Information Systems (GIS) and spatial analysis.

Awards and Commendations

Received multiple certificates of appreciation and recognition related to professional contributions across various technical domains from reputable institutions.

Member of the National Inventors Association

An active member of the country's Inventors Association, contributing to innovation and technical advancement.

Publications & Innovations

Author of Two Volumes on Weigh-in-Motion Systems

Published by the Road Maintenance and Transportation Organization of Iran, covering technical standards, system design, and implementation strategies.

Author of the Book on Geodesy

Published by the Islamic Azad University of Gorgan, focusing on geodetic science and surveying principles.

Floristic Research Project – Oshtorankooh Region

Conducted a comprehensive research study on the flora and biodiversity of the Oshtorankooh mountain range.

Inventor of Laser Camera for Tree Diameter Measurement

Developed a laser-based optical system for precise, non-contact measurement of tree diameters in forestry applications.

Inventor of Tree Debarking Machine

Designed and built a mechanical system for efficient bark removal in forestry operations.

Inventor of Chipboard Glue Mixing Machine

Engineered an industrial-grade machine for optimized adhesive mixing in chipboard production.

Scientific Publications & Conference Presentations

Authored and presented numerous scientific and research papers at national and international conferences.

Professional Experience

Fard Iran Industrial Group – Tehran, Iran

– **Project Manager & Data Analyst – Weigh-In-Motion Systems and GIS Applications**

March 2017 – Present (7 years, 4 months)

- Managing projects in site selection, data analysis, and GIS applications.
- Specialist in Weigh-In-Motion (WIM) systems for intelligent transportation monitoring.
- Leading data-driven solutions for road infrastructure and vehicle tracking systems.

Road Maintenance and Transportation Organization (RMTO) – Tehran, Iran

– **Project Expert & Data Analyst – Weigh-In-Motion Systems and GIS Applications (Contract via Rah Abrisham and Fard Iran)**

March 2020 – September 2023 (3 years, 7 months)

- Expert in WIM and speed camera systems.
- Focus on data science, spatial analysis, and national-scale transport monitoring solutions.

PGPars Company – Tehran, Iran

– **GIS Consultant**

March 2019 – December 2019 (10 months)

- Designed a Web-GIS system for gas pipeline data logger outputs.

AbanRood Tadbir – Azna, Lorestan, Iran

– **Project Manager**

March 2017 – July 2019 (2 years, 5 months)

- Project lead for feasibility studies and design of an artificial lake and tourism site for Azna Municipality.

Azadi Tower Restaurant – Tehran, Iran

– **Founder and Manager**

April 2013 – February 2019 (5 years, 11 months)

- Founded and operated the official restaurant at Azadi Tower in partnership with the Rudaki Cultural and Artistic Foundation.

Amayesh Zistkoreh Pars Consulting Engineers – Tehran, Iran

– **CEO & Co-Founder**

March 2012 – December 2015 (3 years, 10 months)

- Led GIS-based data collection and mapping projects in low-voltage electricity networks in Kermanshah and Gilan provinces.

Applied Scientific Center – Iran Furniture Association

– **Lecturer**

September 2013 – June 2014 (10 months)

- Taught "Computer Use in Basic Architecture" course.

Forests, Rangelands, and Watershed Management Organization – Tehran, Iran

– **GIS & Remote Sensing Expert**

April 2012 – January 2014 (1 year, 10 months)

- Worked at the National Soil Protection Research Institute on GIS/RS-based environmental analysis.

Omran Technical Complex – Tehran, Iran

– **GIS Instructor**

April 2012 – June 2013 (1 year, 3 months)

- Taught introductory and advanced GIS courses.

Rahbord Andishe Apama Company – Tehran, Iran

– **GIS Expert & Project Manager**

October 2010 – June 2012 (1 year, 9 months)

- Managed GIS projects related to economic data and employment development documents in Lorestan, South Khorasan, and West Azerbaijan provinces.

Shomal Consulting Engineers – Gorgan, Iran

– **Project Manager / GIS Expert**

June 2005 – December 2010 (5 years, 7 months)

- Led multiple environmental and forestry projects including water resource and watershed management, greenhouse development, and forestry studies (Kalaleh and Qapan projects).

Rawanab Consulting Engineers – Gorgan, Iran

– **GIS Expert**

May 2009 – September 2010 (1 year, 5 months)

- GIS analyst in the Golidaghi Forestry Project.

Islamic Azad University, Gorgan Branch – Gorgan, Iran

– **Lecturer**

December 2008 – June 2010 (1 year, 7 months)

- Taught undergraduate courses in Civil Engineering and Surveying, including Photogrammetry, Geodesy, Route Mapping, and Surveying Laboratories.

Turkman Computer Training Center – Gorgan, Iran

– **GIS Instructor**

May 2007 – July 2009 (2 years, 3 months)

- Delivered hands-on ArcGIS training courses.

University of Tehran (Forestry Project) – Lorestan, Iran

– **Statistics Expert**

May 2003 – September 2004 (1 year, 5 months)

- Conducted forest inventory and field data collection in Lorestan Province.