REZA SAFARZADEH RAMHORMOZI

Spatial Data Analyst

Address: Unit 285, Entrance 9, Block B4, Phase 1, Ekbatan Town, Tehran, Iran.
Phone: (+98-21)44640821, Cell Phone: (+98-912)4499659
E-Mail: Rsafarzadeh@mail.kntu.ac.ir
URL: Safarzadeh-reza.github.io

EDUCATION AND TRAINING

Sep 2014 – Sep 2017

M.Sc. in Geospatial Information Systems
K. N. Toosi University of Technology, Tehran, Iran
(Center of Excellence in Geospatial Information Technology (CEGIT) in Iran)
GPA: 17.25 out of 20

Thesis title: Optimization of Urban Land use allocation using meta-heuristic algorithms and spatial metrics

Sep 2009 - Sep 2013

B.Sc. in Geomatics Engineering
Iran University of Science and Technology, Tehran, Iran
GPA: 16 out of 20

SKILLS AND INTERESTS

Programming: Python, JavaScript, Java, MATLAB, HTML, CSS
GIS: ArcGIS, QGIS, GeoServer, ArcGIS Server, GDAL
Libraries: ESRI JS API, OpenLayers, ArcPy, NumPy, GeoPandas, Shapely, NetworkX, osmnx, Scikitlearn
Databases: MSSQLServer, MySQL, PostgreSQL, PostGIS
Other software: Auto CAD, Civil 3D, ENVI, IDRISI

Research Interests:
- Spatial Data Mining
- Machine Learning
- Deep Learning
- Geospatial Computing
- Spatial analysis, spatial statistics and visualization
- Web-Based Mapping and GIS
- Spatial Decision Support Systems
- Spatial Data Infrastructure (SDI)
- Urban Planning

HONORS AND DISTINCTION

A member of Iran's National Elites Foundation since January 2018.

Obtained a ranking of 30 among 2700 applicant in The National Examination of Geomatics Engineering for M. S. Entrance, Iran.

Awarded as the best publication in The 2nd National Conference on Geospatial Information Technology (NCGIT), Tehran, Iran, Jan. 2017.

Executive board member of the 1st National Conference on Geospatial Information Technology, Tehran, Iran, Jan. 2016.

Member of Geomatics academic committee of Iran University of Science and Technology (IUST), 2010-2011.

PUBLICATIONS

Safarzadeh R, Karimi M, and Alaei Moghadam S. Multi Objective Optimization of Urban Land Use Allocation Using Meta-heuristic Algorithms and Spatial Metrics. Journal of Geomatics Science and Technology, JGST. 2018; 7 (3):189-212 (http://jgst.issge.ir/article-1-607-en.html)

CONFERENCE PRESENTATION

Safarzadeh, R & Karimi, M. Application of Multi-Objective Particle Swarm Optimization Algorithm in Site Selection for Temporary Housing after Earthquakes in Tehran. Paper presented in Persian at the 2nd International Congress on Earth Science & Urban Development (ESUD), Tabriz, Iran (2016).

Safarzadeh, R., Karimi, M., & Alaei Moghadam, S. Optimization of Urban Land Use Allocation using Non-dominated sorting Genetic Algorithm and Spatial Metrics. Paper presented in Persian at the 2nd National Conference on Geospatial Information Technology (NCGIT), Tehran, Iran (2017).

Safarzadeh, R & Karimi, M. Application of None Dominated Sorting Genetic Algorithm-II in Site Selection for Temporary Housing after Earthquakes in Tehran. Paper presented in Persian at the 3rd International Congress of Earth Sciences & Urban Development (ESUD), Tehran, Iran (2017).

WORK EXPERIENCE

- GIS Manager at "Parsa.co (FANAP ICT)" Company (July 2018 - Currently).
  - Spatial Analysis and site selection for establishing new branches and ATMs for "Pasargad Bank" in Iran
  - Real-time route planning for ATM cash replenishment vehicles, considering the four objectives of: the number of vehicles used, shortest path regarding distance and traffic, fuel consumption, and safeguarding that ATMs do not run out of cash.
  - Using machine learning techniques for road network traffic prediction problem
  - Using spatial trajectory mining techniques to explore vehicle drivers' behaviour and fraud detection
  - Implementation of Web based GIS application (GeoBI) for branches and ATMs network for "Pasargad Bank" in Iran
  - Using HTML, JavaScript (Spatial libraries: ESRI JavaScript API, OpenLayers), Python (Spatial libraries: GDAL, Shapely, PyProj, GeoPandas, NetworkX, osmnx, Scikitlearn)

  (http://www.parsa-cit.com/en , http://en.fanap.ir)

- GIS Specialist at "Avayarsanat" Company (Feb 2017 - June 2018).
  - Implementation and development of web-based GIS applications.
  - Providing Iran's cities tourist map
  - Using ARCGIS software, QGIS, GeoServer, MapServer, PostgreSQL, …

  (http://www.en.avayarsanat.ir)

LANGUAGE SKILLS

Persian (Mother Tongue)   English (IELTS Band Score 7.5)

REFERENCES

Dr. Mohammad Karimi, Associate Professor, GIS Department, Faculty of Geomatics,
K. N. Toosi University of Technology, Tehran, Iran. (mkarimi@mail.kntu.ac.ir)

Dr. Mohammad Taleai, Professor, GIS Department, Faculty of Geomatics,
K. N. Toosi University of Technology, Tehran, Iran. (Taleai@mail.kntu.ac.ir)