Thaer Farag

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23/09/2024

Key skills

- Python
- SQL\PLSQL
- PostgreSQL
- Power Bi
- Microsoft Excel
- Amazon Web Services
- Jira

Education

PhD. of Computer Science Queensland University of Technology (QUT)
Graduated 2020
Learning and skills
1. Python
2. C++
3. ArcGIS products
4. QGIS
5. Data Science
6. AI (ML,DL)
7. Working with multidisciplinary team
8. Research and development
9. Reporting and publication
10. Representing team to professional bodies
11. Ethics and values
12. FME.

Master of Computer Science
India/ Hamdard University
Graduated 2008
Learning and skills

Summary

I am an eager data analyst with a solid background in Python for data science, Power BI, Excel, SQL, and Python. I am also a self-motivated, creative software developer with a strong business perspective. with more than nine years of expertise in converting intricate statistics into understandable insights to accelerate the decision-making process, as well as a track record of improving data and growth processes.

Career history

Geospatial analyst and Developer at Terasmart for data and Remote sensing/GIS solutions
January 2022 – June 2024
Developing GIS mapping and analysing remote sensing imagery based on data science, Machine Learning/Deep Learning, and statistics.

key responsibilities
- Data collecting/management and sources.
- Developing remote sensing-based applications for agriculture, vegetation, forestry, and urbanest.
- Applying Ml/DL in imagery for determining patterns.
- Analysing and reporting results to the higher.

Skills and tools
1. Python. 2. Esri products. 3. Feature Manipulation Engine.
4. Spatial SQL (SQL server). 5. Data sourcing 6. PostgreSQL.
7. Geostatistics. 8. Optimisation.

Achievements
- Mapping platform for mentoring factors and correlations.
- Remote sensing based soil assessment platform.
- Changes predicting and urbanization growing assessment.

Research Associate at QUT- Centre for Accident Research and Road Safety-Queensland (CARRS-Q)
February 2021 – January 2022
Applying data science and mathematics on GIS for developing a real-real time map for car crashes and evaluating safety for vulnerable road users.

Key responsibilities
- Researching and developing GIS models and mapping for road safety.
- Data engineering and analysing.
- Reporting progress to the supervisor and team.

1. ASP.NET
2. C#
3. Oracle
4. Data management
5. JavaScript
6. Java
7. C++
8. Optimisation

Bachelor of Software Engineering
Iraq/Al_Rafidain University
Graduated 2004
Learning and skills
1. Programming thinking and structure
2. Object oriented
3. C++
4. Data analysing
5. Statistics

Courses and training

Spatial Data Analysis in Google Earth Engine Python API
Online/Udemy
Oct 2022-Apr 2023

Machine Learning, Data Science and Deep Learning with Python Sundog Education Academy
Oct 2020 – Oct 2021

Power Bi
Analysing and Visualising Data with Power Bi from Davidson College
Aug 20

AWS Certified Data Analytics Specialty 2020 online course from Sundog Education Academy.
April 2021 - Aug 2021

Introduction to FME Desktop 2020 online courses from Safe software Desember 2020

Using Open-Source Tools to Create an Enterprise GIS
online course Udemy
Jun 2020 – Dec 2020

GIS Fundamentals- Esri online course from European Academy for special studies. Feb 2019 – May 2019

- Working with a multidisciplinary team.
- Developing in the CHAD project for TMR.

Skills and tools
1.Python 2**.** Esri products. 3. Feature Manipulation Engine 4. ASPP. 5. PostgreSQL. 6. MATLAB. 7. Searching and developing.

Achievements
- A 3D space time data-based accident map producing system.
- Network map of separated bus routes lines for QLD.
- Python algorithm for measuring the quantity of people traffic on public transport during the day.
- Statistically measured hot spot road network.
- A platform for visualising spatial data and road safety evaluating

Data Modelling and GIS Developer at Agronxt

October 2019 – November 2020
Developing an autonomous application for analysing satellite images to determine the agriculture changes.

Key responsibilities
- Data collecting, analysing, and referencing
- Reporting to the manager and consulting with stockholders
- Developing application for clustering and change monitoring

Skills and tools
1. Data sourcing (satellite imagery). 2. Python. 3. QGIS.
4. ArcGIS Pro. 5.SQLite. 6.PostgreSQL.

Achievements
- Database for the sources and data catalogues
- Algorithm for analysing rasters and determining lands aspects

Interests

- Applying Artificial Intelligent (AI) in remote sensing and GIS
- Data science (statistics and optimisation) in daily life events
- Working in active, multicultural, and friendly environment

Publications

- A novel hybrid method for synthesising missing pixels in remote sensing imagery
- STCEC: A Remote Sensing Dataset for Identifying Spatial Temporal Change in Homogeneous and Heterogeneous Environments.
- ISODATA-IGTMPP method A novel method for predicting missing pixel in remote sensing

Python for Data Analysis
Online
February 2019 – Jun 2019

Data Analysing with R online
course from Harvard University
Jun 2018 – Aug 2018

Introduction to Creative AI
UAL Creative Computing Institute.
April 2018 – May 2018

AWS Certified Data Analytics Specialty 2020
Sundog Education Academy
May 2020 – Nov 2020

Learn Jira with Agile Scrum Methodology
Nivid Labs
May 2018

Agile methodologies
Shakrof company
March 2018

Academic English and communication skills
Queensland University of Technology.
April 2014 – Jun 2015

Activities and hobbies

- Associate & cooperation with [Spatial Informatics Lab](#)
- Supervising under/postgraduate student in the field
- [Programming Card](#) Facebook page manager
- Writing in Data Science, Python, and For RS/GIS blogs

References

Dr Mohammed Elhenawy: mohammed.elhenawy@qut.edu.au

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Dr Shamsunnahar Yasmin: shams.yasmin@qut.edu.au
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Additions

- Australian Citizen
- Holding Blue Card
- Police Clearance Certificate and Criminal History Screening can be provided.
- More references are available on request.