



Mohammed Al Haek

Computer Science, Data Scientist, Researcher

1987 | Syrian | Male | Single | Living in Cyberjaya

Objective

Enthusiastic and hard-working Masters of Computer Science graduate, with working experience as data scientist, researcher, teaching assistant and data analyst, seeking to apply my knowledge and skills to optimally grow my expertise and professional career with a reputable and established company.

Education

2021-
Current **PhD in Computer Science**, *Multimedia University - Malaysia, MMU*.

2014-2016 **Masters of Computer Science**, *International Islamic University Malaysia, IIUM*.

2008-2014 **Bachelor of Computer Science (Honors)**, *IIUM, CGPA – 3.739/4.0*.

Experience

Dec 2018 – **Research Data Scientist**, *Telekom Malaysia, Research & Development, Malaysia*.

Current Projects:

- Camelia: Centralize Access Management and Line Assessment.
- Patrol: Roadside construction detection and Satellite images analysis.
- Force: Manpower utilization and optimization platform.

Role and tasks:

- Back-end development of ML engine for fault prediction and detection in Python and R.
- Data pipelines and API using FastAPI
- Data collection, storage and presentation
- Time series analysis and forecasting
- Interactive dashboards of database for data analysis using Streamlit.

- Jan 2016 – **Research Assistant**, UNIVERSITY OF MALAYA, Malaysia.
- Jun 2018 Main Project: A quantitative cognitive assessment on students' perception of programming problems.
Role: Performing data collection and analysis from eye-tracking experiments to analyze and map students' mental model while solving programming problems with different representations.
Side Project: Data analysis of the Eye-tracking of Malaysian special needs school students reading Quranic verses in Arabic language.
- Aug 2015 – **Data analysis Assistant**, COMPUTATIONAL INTELLIGENCE LAB, IIUM, Malaysia.
- Dec 2015 Assisted in the data analysis for Digital Competency Standards project in conjunction with Malaysia Digital Economy Corporation (MDEC).
- Feb 2013 – **Graduate Research Assistant**, ARTIFICIAL INTELLIGENCE LAB, IIUM, Malaysia.
- May 2015 Worked on research grant as part of my master degree, and was able to achieve the grants' goals and publishing requirements.
- 2013–2015 **Teaching Assistant**, DEPARTMENT OF COMPUTER SCIENCE, IIUM, Malaysia.
Tutoring and assisting students in various computer science subjects such as: Object Oriented Programming, Elements of Programming, Networks and System Administration, Web Programming, Artificial Neural Network, Machine Learning, Principles of Artificial Intelligence.

Technical skills

Languages: Arabic (Native), English (IELTS band 7.5) and Bahasa Melayu (Basic)

Programming: Python, R, C++ and Java

Data Tools: Pycaret, Streamlit, Plotly, Flask, H2o Flow, Orange Data Mining, Power BI and Tableau.

Database: MySql, SQL, PostgreSQL, Oracle.

Tools: MS Office, Latex and Research management tools.

Web: HTML, CSS, XML, and JavaScript.

Strengths

- Familiarity with wide portfolio of data science applications and environments.
- Profound knowledge and experience in multiple programming languages (Python, R, C++, Java) and development of data-oriented solutions.
- Experience in working with SQL databases and database querying languages.
- Proficiency in data mining, cleaning, wrangling, visualization and reporting.
- Ability to analyze and process complex data sets using advanced querying, visualization and analytic tools (open-source and commercial).
- Strong knowledge of implementing Machine learning algorithms and solutions.
- Extensive experience working in an Agile environment and teams.
- Ability to adapt Scrum concepts and practices: tasks, backlog tracking, burn-down metrics, velocity, user stories.
- Team-player who can also work independently.
- Excellent interaction and relationship-building skills acquired through teaching and tutoring experience.

Certifications and Courses

- IBM Data Science
- Applied Data Science
- TensorFlow in Practice
- Machine Learning with Python
- Natural Language Processing in TensorFlow
- Convolutional Neural Networks in TensorFlow
- Version Control with Git
- Sequences, Time Series and Prediction
- Applied Plotting, Charting & Data Representation in Python
- Databases and SQL for Data Science
- Data Visualization with Python
- Data Analysis with Python
- Clustering Geolocation Data Intelligently in Python
- Getting Started with Power BI Desktop
- Machine Learning with H2O Flow
- Automatic Machine Learning with H2O AutoML and Python
- Create Interactive Dashboards with Streamlit and Python
- Build Data Analysis tools using R and DPLYR
- Data Analytics: Scraping Data using R
- Data Visualization with Plotly Express
- Build a Machine Learning Web App with Streamlit and Python
- Mining Data to Extract and Visualize Insights in Python

Workshops and Conferences

- 2017 Workshop series on: Strategies to Enhance Research Visibility, Impact & Citations - University of Malaya
- 2015 Research Seminar on Big Data: Think about it, Do something about it - University of Malaya
- 2014 The 3rd International Conference on Computer Engineering and Mathematical Science (IC-CEMS) - By Science & Knowledge Research Society
- 2014 IEEE International Conference on Computational Science & Technology (ICCST) - University Malaysia Sabah
- 2015 Seminar on Application and Effective use of SPSS - IIUM
- 2011 MIMOS Workshop: Learn from NASA AMES Scientist - Human-centered computing methods and technologies - In conjunction with MIMOS 25th anniversary.

Publications

Complete and updated list of publications available on Google Scholar [Page](#) and ResearchGate [Page](#).

References

Ir. Dr. Abdul Aziz Bin Abdul Rahman

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TM Research & Development Sdn. Bhd.

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