MARAH SHAHIN

Engineering Scientist | Machine Learning Engineer | Developer

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EXPERIENCE

Artificial Intelligence & Data Specialist
Deloitte

📅 Feb 2022 – Ongoing   ● AKL, NZ

- Undertaken and/or led a range of projects including machine learning, data engineering, cloud engineering, generative AI, mathematical modelling, data governance, data visualisation (Power BI, ServiceNow), AWS, ethical AI, data analysis, and data strategy.
- Specialist since June 2023 (Analyst prior to this).

Strategic Marketing / Junior Business Analyst
Hilti

📅 Aug 2021 – Jan 2022   ● AKL, NZ

- Project lead redefining customer prioritisation by developing an optimisation programme to mathematically identify the highest potential long-term customers
- Facilitated numerous workshops and training sessions for various teams socialising the newly implemented data management standards

Program Advisory Engineer
Aurecon Group

📅 Jan 2021 – Mar 2021   ● AKL, NZ

- Involved in many engineering projects related to: financial modelling, rapid build housing schemes, architecture & design, legal exposure, and child psychology

Asset Management Engineer
WSP

📅 Nov 2018 – Nov 2019   ● AKL, NZ

- Project lead analysing footpath profiles to better identify trips and faults with the goal of reducing hazards and improving footpath comfort for users on wheels
- Assisted in general road engineering projects

ACADEMIC BACKGROUND

BE(Hons) Engineering Science - First Class
University of Auckland

📅 Mar 2017 – Dec 2021

Thesis title: Optimal Experimental Design for Understanding Burn Injuries, A+
Research Project completed: mathematical modelling

BCom Finance and Innovation & Entrepreneurship
University of Auckland

📅 Jan 2018 – Dec 2021

Research Project completed: innovation & entrepreneurship

PERSONAL PROFILE

New Zealand Citizen
Purpose-driven Engineer with a balance of interpersonal and technical skills.

PHILOSOPHY

"Focus on making yourself better, not on thinking you are better."

SKILLS & STRENGTHS

Problem Solving | Project Management
Stakeholder Management | Eye for detail
Analytics | Motivator & Leader
Written & Oral Communication

C++ | Python | VBA | SQL | R
CAD Modelling | Mathematical Modelling
AWS SageMaker | Machine Learning
Deep Learning | Operations Research
TensorFlow | Uncertainty Quantification
SolidWorks | Tableau | Power BI
Computational Engineering | MATLAB

ACHIEVEMENTS

aws **AWS ML Certified**
AWS Machine Learning Specialty Certified

aws **AWS Certification**
AWS Certified Solutions Architect & Cloud Practitioner

🏆 **Dean's Honours List**
Achieved by those attaining a GPA of over 8.25 in a given year

LANGUAGES

English ●●●●●

Arabic ●●●◐○

REFEREES

Available upon request

VOLUNTEER EXPERIENCE

Finance Director
New Zealand Eid Day

📅 Dec 2020 – Ongoing

- Bi-annual free-to-attend festival attracting over 12,000 people in Auckland, and thousands across Christchurch, Wellington, and Hamilton
- Fundraised over $10,000 in 3 days from the public to support the event
- Managing the finance team in sourcing funds and financial reporting
- Advisor to the Entertainment team
- Co-leading stalls owner & stakeholder management and coordination

Operations Manager
Football For Freedom

📅 Oct 2021 – Ongoing

- Annual non-for-profit football tournament and festival
- Managing operations and logistics
- Stakeholder & vendor management
- Advisor to the Entertainment team

NOTABLE PROJECTS

Speed Management Plan (Land & Transport Engineers)
Wellington City Council

📅 May 2022 – Ongoing

Role: Project Manager, Freelance Contractor
Project valued at over $45m where 97% of Wellington roads require speed limit revision under the newly established "Land Transport Rule: Setting of Speed Limits 2022".
Responsibilities include:

- Development Communications and Engagement Plan that follows best practice framework
- Derived and proposed a mathematical model for prioritising road projects in New Zealand
- Client & Stakeholder management and development of on-going timeline programme via Microsoft Project

MLOps and Operational Controls (Deloitte)
Large Banking Client

📅 Jun 2022 – Oct 2022

The engagement objectives were to implement ML operational controls and Responsible AI guidelines across the bank. The controls were delivered using MLOps principles with model training, algorithm optimisation, hyper-parameter tuning and deployment being orchestrated on the AWS SageMaker platform. Marah played a key role across all project activities as a Machine Learning Engineer and Delivery support for the technical advisory stream.

AVERAGE DAY BREAKDOWN

Developing solutions
Networking/socialising
Learning/reading
Meetings
Volunteer work
Gym/exercise