



# Aslm El-Gharabawy

AI & ML | Data | Automation | Simulation | Container Terminal Operations & Design | Product Management

**Contact:** Mobile: +31 6 122 555 05 | Email: [aelgharabawy@gmail.com](mailto:aelgharabawy@gmail.com)

**Nationality:** Dutch (NL / EU)

**Date of birth:** 25<sup>th</sup> of September 1985

 [linkedin.com/in/aelgharabawy](https://www.linkedin.com/in/aelgharabawy)

## Work Experience



**MAERSK**

Jan 2023 - Now

Projects

### Lead AI/ML & Simulation Solution Architect

Technical Team Lead for R&D, development and deployment of Digital Twin Simulation, AI and Automation. Acting as a Subject Matter Expert on container terminal operations and AI/ML, and providing guidance and leadership for these principal accountabilities:

- **AI/ML Architecture:** Develop and maintain AI/ML solution architecture, used across APM Terminals & Fleet Management at global, regional and local level with high degree of standardization and scalability.
- **Digital Twin Simulation:** Develop accurate simulation models that assist in cost & resource optimization of container terminal operations, enabling the operations to "do same with less, or more with same".
- **Forecasting & Optimization:** Bring forecasting, optimization, simulation AI/ML techniques to solve business problems and develop a journey map from ideation to scaled AI/ML implementation.

APMT Algeciras, Algeciras, ES | APMT Elizabeth, New Jersey, USA | Aqaba Container Terminal, Aqaba, JO | APMT Moín, Moín, CR | Port of Salalah, Salalah, OM | APMT MedPort Tangier, Tangiers, MA

**PHILIPS**

May 2022 - Dec. 2022

### Engineering Manager Data Analytics & AI Platform

Versatile role where Product Vision, Strategy and Engineering Excellence are key. Principal accountabilities:

- **Team Building & Leadership:** build a team of Data Architects & Data Engineers partnering closely with Business Units and Data Scientists to develop new use cases, scale up and support analytics execution.
- **Platform Architectures:** Accountable for the deployment and integration; providing performance enhancements through data & AI/ML; pushing for enhanced reliability to support product development.
- **Stakeholder Collaboration:** Liaise with stakeholders to gather, prioritize, and document requirements.

**navis**

Apr. 2019 - Apr. 2022

Projects

### Technical Product Manager Navis AI Platform | Lead Data Scientist

Started as Technical Lead and was later Technical Product Manager of the Navis AI Platform, empowering the complete Navis Smart Apps portfolio and 3rd party apps with predictive analytics for container terminals.

- **Data Analysis and Modeling:** Developing and managing the end-to-end ML lifecycle, from data exploration to model operationalization.
- **Predictive:** Build predictive models for container flow, equipment utilization, and resource allocation.
- **Smart Supply Chain:** Development of AI solutions for Automated Decision-making.

Rotterdam World Gateway, Rotterdam, NL | APMT MVII, Rotterdam, NL | Port of Genoa, Genoa, IT | Eurogate CTB, Bremerhaven, DE | Port of Beira, Beira, MZ | SOCAR Terminal, Izmir, TR

**navis**

May 2016 - Mar. 2019

Projects

### Senior Professional Services Consultant - TOS, Operations & Automation

- **Client Engagement:** Collaborate with container terminal operators to understand business processes and operational challenges.
- **Solution Implementation:** Deploy, configure, and optimize Terminal Operating Systems (TOS) and other software and automation solutions tailored to client needs.
- **Terminal Design:** Implement solutions to improve terminal throughput and operational efficiency.
- **Process Analysis:** Conduct workflow assessments to identify inefficiencies and recommend improvements for container terminal operations.
- **Project Management:** Lead implementations and meeting timelines, budgets, and client expectations.
- **Travel:** Visit client sites as needed to oversee implementations and provide on-ground support.

Rotterdam World Gateway, Rotterdam, NL | APMT MVII, Rotterdam, NL | Port of Genoa, Genoa, IT | Eurogate CTB, Bremerhaven, DE | Port of Beira, Beira, MZ | SOCAR Terminal, Izmir, TR

**SIEMENS**




May 2015 - Apr. 2016

Projects

### Data Scientist | Solution Design Engineer

- Developing intelligent mobility solutions for intermodal networking of traffic and logistic systems utilizing SCADA (Supervisory Control And Data Acquisition) control system architecture and PLC technology.
- Leading and delivering forecasting and predictive modeling projects from start to finish.
- Collaborating with stakeholders to ensure measurable business impact and continuous improvement.
- Working on machine failure prediction to ensure the highest safety levels for all travelers.

Noord/Zuidlijn (Metro Line 52), Amsterdam, NL

 Jun. 2014 - Apr. 2015  Projects	<b>Process Automation Consultant, Professional Services - EMEA region</b>   <a href="#">Recommendation Letter</a> <ul style="list-style-type: none"> <li>Working closely, onsite and offsite, with container terminals internationally to define, prioritize and document business and operational requirements for enterprise-level distribution &amp; center supply chain management solutions.</li> <li>Managing the implementation of Process Automation solutions to streamline terminal operations and increase productivity, resulting in lower operational costs, better SLA compliances and more safety.</li> </ul> APMT Elizabeth, NJ, USA   Port of Salalah, Salalah, OM   Khalifa Bin Salman Port, Al Hid, BH   Port of Apapa, Lagos, NG   Port of Cotonou, Cotonou, BJ   Port of Durban, Durban, SA
 Oct. 2012 - Apr. 2013  Project evaluation	<b>Cabin Avionics Engineer</b>   <a href="#">Recommendation Letter</a> Successfully managing a unique <a href="#">feasibility study</a> and innovative concept design project to develop LED landing lights including outsourced production with potential partners like Philips and Fokker Technologies, while complying with all necessary airworthiness and certification regulations. The study showed that KLM could significantly reduce maintenance cost using the prototyped design.  Overall performance: <i>excellent</i>
<b>Education</b>   Sep. 2011 - Dec. 2014	<b>Master Aerospace Engineering   Control &amp; Operation, Air Transport &amp; Aerospace Operations</b> Automatic Flight Control System Design, Airline Operations & Management, Value Engineering & Operations Optimization, Network & Fleet Management, Safety Engineering, Avionics and Operations. Thesis: LED Landing Lights, Design, Certification & Production <b>Delft University of Technology</b>   Faculty of Aerospace Engineering
 Sep. 2009 - Feb. 2010	<b>Minor Educational Science, Didactics and Pedagogics   Teacher Training Course</b> Transfer of Knowledge, Didactical Skills, Teaching Methodology of Technology, Educational Science: Pedagogical and Organizational Competences, Semester Internship. <b>Delft University of Technology</b>   Faculty of Applied Sciences
 Sep. 2007 - Sep. 2011	<b>Bachelor Aerospace Engineering</b> Mechanics, Aerodynamics, Aircraft Structures, Thermodynamics, Propulsion and Power, Materials and Manufacturing, Space Engineering <b>Delft University of Technology</b>   Faculty of Aerospace Engineering
<b>Courses &amp; Certificates</b>   Dec. 2024  Name of providing organization	<b>TSE &amp; GDA Hackathon Winner</b> AI-Driven Dynamic Yard Layout Optimization: Revolutionize terminal and warehouse operations with NeoSpace, an AI-powered solution that dynamically optimizes yard layouts in real-time. This intelligent, self-improving system not only transforms static yard management, but also creates a smarter, more agile, and sustainable process – setting a new benchmark for value creation in logistics and supply chain operations. <b>Maersk</b> - Copenhagen, Denmark
 Jun. 2021  Name of providing organization	<b>Navis Star Award</b>   <a href="#">View Award</a> Award for delivering high quality AI models with efficiency and excellence, sharing knowledge with peers, working without time bounds, and being a maximizer. My contributions have made Navis a credible industry leader in the innovative Maritime AI/ML space. <b>Navis</b> - Oakland, CA, USA
 May 2020  Name of providing organization	<b>Out-Of-The-Box Virtual Hackathon Winner</b>   <a href="#">View Certificate</a> Developed a ML model for predicting the Ship-to-Shore Vessel Productivity and Estimated Time of Completion by correlated the most impacting Container Terminal processes and weather conditions. Deployed at various container terminal customers after matured development. <b>Navis</b> - Oakland, CA, USA 1 of 5 winners selected from 120+ ideas explored by 56 teams globally
 Jun. 2015  Name of providing organization	<b>SIMATIC S7 PLC System Course</b> Gaining the knowledge and skills necessary to successfully program and deploy PLC's for automation systems in centralized and decentralized configurations. <b>Siemens</b> - Zoetermeer, The Netherlands



Jun. 2015 & Jan. 2016

Name of providing organization

## SCADA (Supervisory Control & Data Acquisition) / WinCC Open Architecture Courses

SCADA courses using WinCC OA (Basic & Advanced). Typical subjects:  
Performance, Communication, Redundancy and Distributed Systems.

**ETM professional control GmbH** - Eisenstadt, Austria | 100% owned subsidiary of Siemens AG

### Skills & Competences

Languages

**English** (excellent use), **Dutch** (mother tongue), **Arabic** (mother tongue)

Organizational

International Work Experience | Consultancy | Project Management | Product Management

AI / ML & Predictive Analytics

Machine Learning | Deep Learning | Classification | Regression | Clustering | Computer Vision |  
Time Series Forecasting | Natural Language Processing | Reinforcement Learning

Software Development

C / C++  
Java

Python  
PHP

JavaScript  
CSS

HTML  
XML

Data Science

Python  
Pandas

NumPy  
Scikit-Learn

PyTorch  
Tensorflow

Matplotlib  
Seaborn

Data Engineering

Spark / PySpark

Databricks

SQL

PostgreSQL

ML-Ops

MLflow

Docker

Kubernetes

Airflow

Cloud

AWS

Azure