

# Omar Hamed Marei

New Cairo, Egypt | (+20) 109 038 3142

omarhamed440@gmail.com | [Github](#) [LinkedIn](#)

## Career Summary

Software Engineer - Machine Learning • MLOps Engineer • Python Developer

- **An organized, adaptable and analytical software engineer** with +2 years of experience specializing in machine learning, data science, and frontend development. Committed to innovating data-driven systems for improved user experiences.
- **Business-focused engineer adept at bridging machine learning use cases to end users**, leveraging UI/UX and front-end expertise for user-friendly deployment.
- **Skilled in data analytics and visualization**, transforming complex data into user-friendly designs that provide valuable insights for data science projects.
- **Positioned to combine expertise in software engineering and machine learning** to deliver impactful, user-centric data-driven business solutions.

## Areas of Expertise

- |                          |                    |                         |
|--------------------------|--------------------|-------------------------|
| • Software Engineering   | • Machine Learning | • Front-end development |
| • UI / UX Design         | • Data Science     | • Backend Development   |
| • Cloud Services (Azure) | • Data Analysis    | • Big Data Engineering  |

## Work Experience

Giza Systems, New Cairo, Egypt

September 2022 - Present

leading systems integrator in the MEA region, designs and deploys industry-specific technology solutions for asset-intensive industries

### Software Engineer - Machine Learning

Recruited to apply the software engineering principles and a variety of software methods like OOP, internet protocols, agile/scrum methodologies, databases, version control, containers, and unit testing to develop end-to-end pipelines including ML models to perform different types of advanced analytics. Also, works in collaboration with data scientists.

- **Successfully designed and implemented low-level software** for a variety of different domain projects, by reducing design-related issues while maintaining a high code quality standards.
- **Continuously enhanced ML business solution use cases** by implementing advanced modeling techniques into pipelines, ensuring user-friendliness and meaningful outcomes and enhancing overall performance.

WE Work Group, Alexandria, Egypt

March 2021 - August 2021

An early-stage startup that provided service and software solutions to clients in the software industry, primarily operating on a project-based model for its clientele.

### Software Engineer - Frontend

- **Streamlined requirement gathering, reducing design iteration cycles by 50%** through dynamic user interface prototypes.
- **Enhanced user experience and website performance** by optimizing page load time with cutting-edge web

technologies like React, resulting in a 20% improvement

---

## Education

### 9-month Post-Graduate Degree in AI and Machine Learning

Information Technology Institute (ITI), Smart-Village, Giza • October 2021-July 2022

### Bachelor in Computer Science (BCS) - Minor in Software Engineering

Faculty of Computers and Information Technology, Kafr El-Sheikh University, Egypt • October 2017-June 2021

---

## Skills

Python | Javascript | Java | Sklearn | PySpark | SparkML | AutoML | MLFlow | Supervised/Unsupervised Algorithms | Numerical Optimization | TensorFlow | Keras | Computer Vision (CNN) | Dash "Plotly" | Matplotlib | Seaborn | Power BI | Kibana | SQL | NoSQL (Mongo DB) | Redis | GraphQL | Apache Kafka | Apache Spark | Apache Airflow | Django | Node Js | React Js | Redux | Bootstrap | Material UI | Html | CSS | Figma | Linux | Docker | Git | GitHub | Azure repos | Azure DevOps | Trello | AWS Sage Maker

---

## Selected Certifications

### Microsoft Power BI Data Analyst Certified

Microsoft • 2023

### Machine Learning Specialization

Coursera • 2023

### AWS Machine Learning Engineer Nano-degree

Udacity • 2022

### React Nano-degree

Udacity • 2021

### Data Scientist With Python Track

Datacamp • 2022

---

## Selected Projects

### Virtual Assistant - (Django, React)

Developed React-based frontend web pages for a voice interface Virtual Assistant project, incorporating a lip sync model and speech-to-text solutions. Enabled the Virtual Assistant to respond to operator questions.

### Automatic Number Plate Recognition (ANPR) - (Flask, JavaScript)

Implemented OCR algorithm for precise license plate reading and led UI/frontend development for seamless user interactions.

### Real-time Chat App - (NodeJS, React)

Developed and hosted a real-time chat app using JavaScript, Socket.IO, React, and NodeJS. Designed UI and implemented real-time communication.

---

## Languages

- Arabic - Native
- English - Professional