

PROFESSIONAL SUMMARY

Results-driven Software Engineer and AI/ML Engineer with 2+ years of experience designing, developing, and deploying scalable web applications and machine learning solutions. Proficient in Python, Django, Odoo, TensorFlow, and PostgreSQL. Demonstrated ability to build end-to-end AI pipelines, automate workflows, and deliver data-driven insights within cross-functional government and enterprise environments. Passionate about leveraging deep learning and generative AI to solve real-world challenges.

TECHNICAL SKILLS

Programming Languages	Python · Java · SQL
Frameworks & Libraries	Django · Odoo · TensorFlow · Keras · NumPy · Pandas · Matplotlib · Seaborn · Bootstrap
Databases	PostgreSQL · Relational Database Design
AI / Machine Learning	Deep Learning · DCGANs · Model Training & Evaluation · Data Preprocessing
DevOps & Tools	Docker · CI/CD · Git · GitHub · Jupyter Notebook
Web Technologies	REST APIs · Web Scraping · BeautifulSoup · Requests
Soft Skills	Problem Solving · Analytical Thinking · Technical Reporting · Cross-functional Collaboration

PROFESSIONAL EXPERIENCE

AI/ML Engineer – Independent Projects

2022 – 2023

Remote / Freelance

- Designed, implemented, and trained DCGAN (Deep Convolutional GAN) models to generate high-fidelity synthetic anime face images.
- Developed custom data preprocessing algorithms achieving clean, analysis-ready datasets from raw inputs.
- Produced detailed analytical reports and visualisations using Matplotlib and Seaborn to communicate model results.

KEY PROJECTS

Crowdfunding Simulation Platform

■ github.com/mohamadbakri/crowd-invest-django

Stack: Python · Django · PostgreSQL · Bootstrap

- Built a full-stack crowdfunding web platform enabling users to create, manage, and fund projects.
- Integrated secure payment gateways and implemented responsive UI with Bootstrap.

Traffic Certificates Management System

■ github.com/mohamadbakri/certificates

Stack: Python · Odoo · PostgreSQL

- Designed and deployed a government-grade traffic certificate system using Odoo ERP.
- Automated certificate generation and validation, cutting processing time significantly.

Students-to-Course Enrollment System

■ github.com/mohamadbakri/iti

Stack: Python · Odoo · PostgreSQL

- Engineered a custom Odoo module for student enrollment and course scheduling.
- Implemented data validation processes ensuring 100% accuracy of enrollment records.

DCGAN – Anime Face Generation

■ github.com/mohamadbakri/DCGAN

Stack: Python · TensorFlow · Keras · NumPy · Matplotlib · Seaborn

- Trained a Deep Convolutional GAN to generate realistic synthetic anime faces.
- Applied advanced deep learning optimisation techniques and visualised results with Matplotlib.

EDUCATION

CERTIFICATIONS & TRAINING

AI & Data Science – Microsoft Machine Learning Engineer

Digital Egypt Pioneers Program (DEPI) · Ministry of ICT, Egypt | April – October 2024

Business English Track – Round 1

Digital Egyptian Pioneers · SYE English Science Community · Ministry of ICT, Egypt | April – October 2024

TechAmbassadors – Backend Development using Python

Information Technology Institute (ITI) · Ministry of ICT, Egypt | May – October 2022

CompTIA A+

CompTIA — IT Hardware & Software Fundamentals

Cisco CCNA

Cisco — Networking & Infrastructure Fundamentals



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Cisco Certified Network Associate (CCNA)

Cisco Systems, Inc. · Certified April 10, 2021 · ID: CSC013994032