Adham Abdelazeem

Slevogtstr.5, Bremen, 28209 • (+49) 17674800457
m.adham.bio@gmail.com
www.linkedin.com/in/adham-abdelazeem
https://www.xing.com/profile/Adham_Abdelazeem

Professional Summary

Driven Machine Learning Engineer with a Master's in Biomedical Engineering. I have a solid background in computer vision techniques, machine learning, Python, and cloud computing, and I enjoy tackling tough problems and finding innovative solutions. My aim is to use my skills to develop intelligent systems that have a real-world impact. As a Machine Learning Engineer, I'm excited to bring my technical expertise and innovative problem-solving abilities to a dynamic team.

Education

- **Master of Science (M.Sc.) - Biomedical Engineering** Oct 2021 - Jun 2024
  Anhalt University of Applied Sciences, Köthen, Germany
  - **Master thesis topic:** "Feature Engineering, Machine Learning and Computer Vision-based Approach for Optimization of Pet Food Chunks"
  - **Relevant Coursework:** Machine Learning and AI, Advanced Programming (Medical Assistant ChatBot), Directed Research Studies (Interactive computer vision game), Biostatistics, Graphical Programming

- **Bachelor of Science (B.Sc.) - Biomedical Engineering** Oct 2013 - Jul 2018
  Minia University, Minia, Egypt
  - **Grade:** Very Good
  - **Bachelor thesis topic:** Artificial Pancreas (Automated Insulin Delivery System)

SKILLS

- **Programming Languages:** Python, Matlab
- **Programming frameworks:** TensorFlow, Scikit-learn, Numpy, Pandas, CV, FastApi, and Keras.
- **Technologies:** Azure, Docker, MySQL, Kubernetes, Kubeflow, MLFlow and Terraform.
- **Languages:** English (Full Professional Proficiency), German (Limited working proficiency B1).
- **Soft Skills:** Excellent in presentation, Action Oriented, Communicating effectively, Resilient, Self-Development, Planning and Aligning.

Work Experience

- **Data Scientist Intern / Thesis,** *Mars, Verden, Germany* May 2023 - Apr 2024
  - Utilized feature engineering techniques such as PCA, Correlation, and Wrapper methods to reduce 96.5% of features maintaining the same accuracy values.
  - Enhanced software capabilities using computer vision techniques.
  - Applied Machine Learning models such as Random Forest KNN, SVM, Multilayer Perceptron, Xtreme Gradient Boosting (xgb), and Logistic Regression.

- **Data Scientist Intern,** *ZUMMIT INFOLABS, Remote* Oct 2022 - Jan 2023
  - The role encompasses problem-solving skills by applying MLOPs, Data Pipelines, and various ML models algorithms such as Neural Networks, SVM, and Deep Learning.
  - Enhanced model accuracy by 10% through optimized hyper-parameter tuning.
  - Implemented solutions for basic ML problems such as House Price prediction, Digit classification, and prostate cancer detection.

- **Healthcare systems executive engineer**, *KHABEER, Cairo, Egypt* Nov 2020 – Apr 2021
  - Successfully integrated various lab devices, monitors, and medical devices with hospital information systems, enhancing data flow and operational efficiency within the healthcare setting.

- **Biomedical Sales Engineer**, *Arabic Chemical Consulting Center, Egypt* Jun 2020 – Oct 2020
  - Enhanced radiation protection measures for X-rays and CT rooms, promoting safer diagnostic practices.
  - Provided reliable Non-Destructive Tests (NDT) services.

- **Healthcare systems executive engineer**, *International Medical Center, Egypt* Apr 2019 – May 2020
  - Monitored and resolved issues within hospital information systems, maintaining uninterrupted and efficient hospital operations.

- **Biomedical Sales Engineer**, *Arabic Chemical Consulting Center, Egypt* Aug 2018 – Mar 2019

- Enhanced radiation protection measures for X-rays and CT rooms, promoting safer diagnostic practices.
- Provided reliable Non-Destructive Tests (NDT) services.

Hackathon

As a member of the team in the Reef Restoration Hackathon, we achieved a 7th-place finish by successfully conducting a coral classification task to differentiate between healthy and damaged corals. We utilized Convolutional Neural Network (CNN) techniques, including data augmentation and label balancing methods, to accomplish this task, and our work was evaluated using the Highest F1 Score.
Link: Home- Mars Coral (buildingcoral.com)

Projects

Repository link: https://github.com/Adham-Abdelazeem