# Maya Elmosalamy

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#### **About**

AI undergraduate skilled in computer vision, NLP, and predictive modeling. Passionate about deploying ML solutions for industrial automation. Projects on <u>Github</u> and <u>LinkedIn</u>.

#### Education

Misr International University (MIU) | Cairo, Egypt Bachelor of Science in Computer Science | Expected 2026

**GPA:** 3.52

#### **Experience**

#### Dell Technologies Summer Academy Intern | August 2025 - September 2025

- Completed 160+ hours of expert training in Agile, SWE, AI, and cybersecurity.
- Designed a capstone solution to combat online misinformation from both business and technical perspectives.
- Gained industry exposure via professional shadowing and an on-premise data center tour.

#### Certificates

Artificial Intelligence Fundamentals Program – IBM SkillsBuild

#### **Projects**

## Lane Detection using Deep Learning on TuSimple Dataset

Developed a lane segmentation system for autonomous driving using PyTorch, comparing CNN architectures (U-Net, FastSCNN, ENet) on the TuSimple dataset; achieved high performance with U-Net via a custom data pipeline and weighted loss functions.

## NLP Fake News Detection using Machine & Deep Learning

• Engineered a bilingual (EN/AR) fake news classifier using ML (SVM, XGBoost) and DL (BERT, BiLSTM) models on a 600K+ article dataset; achieved 94% accuracy with a tuned SVM model.

# **Housing Prices Prediction - Machine Learning**

• Built and optimized predictive models on a Kaggle housing dataset using regression techniques, enhancing performance via GridSearchCV and cross-validation.

## **Curve and Lane Detection - Image Processing**

• Engineered a lane detection system for autonomous navigation by implementing Hough Transform and custom Region of Interest (ROI) algorithms in Python.

# **Credit Card Approval Prediction - Al**

- Cleaned and preprocessed applicant data; applied genetic algorithms for feature selection.
- Trained Decision Tree, KNN, and MLP classifiers; achieved 75% prediction accuracy.

## **Skills**

- Programming: Python, JavaScript, C++, Java, C#, PHP
- ML Libraries: PyTorch, Scikit-learn, Transformers, TensorFlow (basic)
- Tools: Google Colab, VS Code, Git, MySQL, OpenCV
- Soft Skills: Leadership, Communication, Fast Learner, Time Management, Documentation, Research

## Languages

Arabic (Native), English (Fluent), German (B1 Intermediate)

## **Extracurricular Activities**

- University Admissions Team Member | MIU | 2025 Present
- Competitor | Egyptian Collegiate Programming Contest (ECPC) | 2025
- Head of Media | Tuners Club MIU | 2023-2024
- Head of Media | ACPC Club MIU | 2024-2025
- Volunteer | RiseUp Summit & Various Charities | 2019 Present
- Volunteer Usher | University Events | 2023 Present