

Ahmed Mohamed - AI/ML Engineer


Complete Professional Profile & Portfolio

PROFESSIONAL OVERVIEW

Name: Ahmed Mohamed

Username: 3bsalam-1

Role: Machine Learning Engineer | Python Expert | Neural Network Design & API Development

Status:  Available For Hiring

Education: B.Sc. Computer Science, Suez Canal University (Grade: Very Good)

Location: Ismailia, Egypt

Timezone: UTC +02:00 (14:14 local time)

Professional Taglines

- AI / Machine Learning Engineer
 - Data Scientist
 - Deep Learning Enthusiast
 - Python Developer
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GITHUB STATISTICS

Community Engagement

- **Followers:** 154
- **Following:** 100
- **Public Repositories:** 24
- **Stars Received:** 59
- **Projects:** 0 public projects
- **Packages:** 0 published packages

Ranking & Recognition

- **GitHub Developer Program Member**

- Ranked in Egypt for active development contributions
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GITHUB ACHIEVEMENTS

Earned Badges & Accomplishments

1. **Pair Extraordinaire** (x3)

- Demonstrated exceptional collaboration through paired programming
- Multiple instances of collaborative contribution excellence

2. **Galaxy Brain** (x3)

- Provided outstanding answers and solutions to complex problems
- Recognized for exceptional community contributions

3. **Pull Shark** (x2)

- Successfully merged multiple pull requests
- Active contributor to collaborative projects

4. **Quickdraw**

- Rapidly closed issues with efficient solutions
- Demonstrated quick problem-solving capabilities

5. **YOLO**

- Merged pull requests without review (when appropriate)
- Shows confidence and code quality standards

Special Highlights

- **Developer Program Member:** Official GitHub Developer Program participant
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ABOUT ME

I am a motivated **AI/ML Engineer** and a recent Computer Science graduate from **Suez Canal University** (Grade: Very Good). I specialize in building end-to-end Machine Learning solutions, from data analysis and preprocessing to model development and deployment. My passion lies in Deep Learning, Computer Vision, and creating intuitive applications using Python.

Professional Philosophy

python

```
class AI_Engineer:
    def __init__(self):
        self.name = "Ahmed Mohamed"
        self.role = "AI/Machine Learning Engineer"
        self.education = "B.Sc. Computer Science (Suez Canal University)"
        self.location = "Ismailia, Egypt"

    def get_skills(self):
        return {
            "Core": ["Python", "Data Structures", "Algorithms"],
            "AI_ML": ["TensorFlow", "PyTorch", "Scikit-learn", "Computer Vision"],
            "Deployment": ["FastAPI", "Docker", "Desktop Apps (Tkinter)"]
        }

    def say_hi(self):
        print("Welcome to my profile! Let's build something amazing with AI. 🚀")
```

🔧 TECHNICAL SKILLS & EXPERTISE

AI/ML Frameworks & Libraries

- **TensorFlow** - Deep learning framework for production-ready models
- **PyTorch** - Research-focused deep learning framework
- **Keras** - High-level neural networks API
- **Scikit-learn** - Traditional machine learning algorithms
- **OpenCV** - Computer vision and image processing
- **Pandas** - Data manipulation and analysis
- **NumPy** - Numerical computing and array operations

Programming Languages

- **Python** (Primary) - Expert level, production-ready code
- **C++** - Systems programming and algorithm optimization

- **SQL** - Database management and queries
- **HTML5** - Web markup and structure
- **CSS3** - Styling and responsive design
- **JavaScript** - Client-side interactivity

Development & Deployment Tools

- **FastAPI** - Modern, fast web framework for building APIs
- **Docker** - Containerization and deployment
- **Git & GitHub** - Version control and collaboration
- **Linux** - Development environment and server management
- **VS Code** - Primary development environment
- **Jupyter Notebook** - Data analysis and experimentation
- **Firebase** - Backend services and real-time databases

Specialized Skills

- **Desktop Applications:** Tkinter-based GUI development
- **API Development:** RESTful services with FastAPI
- **Computer Vision:** Image processing, object detection, OCR
- **Deep Learning:** Neural network design and training
- **Data Science:** Statistical analysis, feature engineering
- **MLOps:** Model deployment and monitoring

CORE COMPETENCIES

Machine Learning Pipeline

1. Data Collection & Preprocessing

- Data cleaning and transformation
- Feature engineering and selection
- Handling missing data and outliers

2. Model Development

- Algorithm selection and implementation
- Hyperparameter tuning
- Cross-validation and evaluation

3. Model Deployment

- API development with FastAPI
- Dockerization and containerization
- Production monitoring and maintenance

Specialization Areas

- **End-to-End ML Solutions:** Complete pipeline from data to deployment
 - **Deep Learning:** CNN, RNN, and advanced architectures
 - **Computer Vision:** Image classification, object detection, OCR
 - **Natural Language Processing:** Text analysis and processing
 - **Reinforcement Learning:** Q-Learning and environment simulation
 - **Desktop Application Development:** User-friendly GUI applications
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FEATURED PROJECTS (PINNED REPOSITORIES)

1. FitSync

Category: Health & Fitness Ecosystem

Stars: 3

Technologies: Jupyter Notebook, Mobile Development, AI

Description:

A holistic fitness ecosystem designed to bridge the gap between workout tracking, nutrition management, and AI-driven insights. It seamlessly integrates a cross-platform mobile application, a responsive web platform, and AI-powered features to create a comprehensive fitness solution.

Key Features:

- Cross-platform mobile application
- Nutrition management system
- AI-driven fitness insights

- Workout tracking integration
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2. MountainCar

Category: Reinforcement Learning

Stars: 5

Technologies: Python, OpenAI Gymnasium, Q-Learning

Description:

A professional, modular reinforcement learning implementation that solves the classic MountainCar-v0 environment from OpenAI Gymnasium using Q-Learning algorithm. Demonstrates advanced RL concepts and clean code architecture.

Key Features:

- Q-Learning algorithm implementation
 - Modular and professional code structure
 - OpenAI Gymnasium integration
 - Performance optimization
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3. Soundify - Arabic OCR Text-to-Speech

Category: OCR & Speech Synthesis

Stars: 3 | Forks:** 1

Technologies: Python, OCR, TTS, Desktop Application

Description:

Soundify is a Python desktop application that converts Arabic text from images into spoken audio. It offers two OCR recognition modes in a single unified interface, making it versatile for different use cases.

Key Features:

- Dual OCR recognition modes
 - Arabic language support
 - Text-to-speech conversion
 - Desktop GUI interface
 - Image processing capabilities
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4. Regression Models

Category: Machine Learning & Deep Learning

Stars: 2

Technologies: Jupyter Notebook, Scikit-learn, TensorFlow

Description:

A comprehensive collection of regression model implementations using both Machine Learning and Deep Learning approaches for predicting housing prices. Demonstrates various modeling techniques and comparative analysis.

Key Features:

- Multiple regression algorithms
 - ML and DL implementations
 - Housing price prediction
 - Comparative performance analysis
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5. Car-Info API

Category: REST API & Machine Learning

Stars: 2

Technologies: Python, FastAPI, Gradient Boosting

Description:

A professional FastAPI-based REST API that predicts car prices using a Gradient Boosting machine learning model. Simply provide a car brand, and the API returns an intelligent price prediction along with detailed insights.

Key Features:

- FastAPI framework
 - Gradient Boosting model
 - RESTful API design
 - Price prediction service
 - Professional error handling
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6. Mood Detection

Category: Computer Vision & Deep Learning

Stars: 3

Technologies: Python, CNN, OpenCV, Image Processing

Description:

A professional deep learning project that detects facial mood expressions (Happy vs Sad) from images using a Convolutional Neural Network (CNN). Features real-time prediction via camera or file upload.

Key Features:

- CNN-based emotion detection
 - Real-time camera integration
 - Binary classification (Happy/Sad)
 - Image preprocessing pipeline
 - User-friendly interface
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CERTIFICATIONS & PROFESSIONAL DEVELOPMENT

1. Supervised Machine Learning: Regression and Classification

Institution: DeepLearning.AI & Stanford University

Platform: Coursera

Focus Areas:

- Machine Learning fundamentals
- Regression models and techniques
- Classification algorithms
- Model evaluation and optimization

2. Python Project: pillow, tesseract, and OpenCV

Institution: University of Michigan

Platform: Coursera

Focus Areas:

- Image processing with Pillow
- OCR with Tesseract

- Computer Vision with OpenCV
 - Practical project implementation
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CONTACT INFORMATION

Primary Contact

- **Email:** 3bsalam0@gmail.com
- **Location:** Ismailia, Egypt
- **Timezone:** UTC +02:00

Professional Networks

- **LinkedIn:** [linkedin.com/in/ahmed-abdulsalam1](https://www.linkedin.com/in/ahmed-abdulsalam1)
- **GitHub:** github.com/3bsalam-1
- **Medium:** medium.com/@3bsalam0

Social Media

- **Twitter/X:** [@3BSALAM_1](https://twitter.com/@3BSALAM_1)
 - **Instagram:** [@3bsalam.1](https://www.instagram.com/@3bsalam.1)
 - **Facebook:** [3BSALAM.Alien](https://www.facebook.com/3BSALAM.Alien)
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PROFESSIONAL FOCUS & EXPERTISE

Current Focus Areas

1. End-to-End Machine Learning Solutions

- Complete pipeline development from data collection to deployment
- Production-ready ML systems
- Scalable architecture design

2. Deep Learning & Neural Networks

- Convolutional Neural Networks (CNN)

- Recurrent Neural Networks (RNN)
- Advanced architectures and optimization
- Transfer learning and fine-tuning

3. Computer Vision Applications

- Image classification and segmentation
- Object detection and tracking
- Optical Character Recognition (OCR)
- Real-time video processing

4. API Development & Deployment

- RESTful API design with FastAPI
- Microservices architecture
- Docker containerization
- Cloud deployment strategies

5. Desktop Application Development

- User-friendly GUI with Tkinter
- Cross-platform compatibility
- Integration with ML models
- Real-time data processing

TECHNICAL CAPABILITIES

Data Science & Analytics

- Statistical analysis and hypothesis testing
- Exploratory Data Analysis (EDA)
- Data visualization and reporting
- Feature engineering and selection
- Handling imbalanced datasets
- Time series analysis

Machine Learning

- Supervised learning (Classification, Regression)
- Unsupervised learning (Clustering, Dimensionality Reduction)
- Ensemble methods (Random Forest, Gradient Boosting)
- Model selection and evaluation
- Hyperparameter optimization
- Cross-validation techniques

Deep Learning

- Neural network architecture design
- Convolutional Neural Networks (CNN)
- Recurrent Neural Networks (RNN)
- Transfer learning
- Model optimization and regularization
- TensorFlow and PyTorch implementations

Software Engineering

- Clean code principles
- Version control with Git
- API design and development
- Testing and debugging
- Documentation and code reviews
- Agile development practices

PROFESSIONAL STRENGTHS

Technical Excellence

- Strong foundation in computer science fundamentals
- Proficiency in multiple programming paradigms
- Deep understanding of ML algorithms and mathematics

- Practical experience with industry-standard tools

Problem-Solving

- Analytical thinking and logical reasoning
- Creative solution design
- Performance optimization
- Debugging and troubleshooting

Communication & Collaboration

- Active GitHub community member (154 followers)
- Technical writing on Medium
- Collaborative project experience
- Code review and mentoring

Continuous Learning

- Verified certifications from top institutions
- Active in latest AI/ML developments
- Hands-on project implementations
- Open-source contributions



CAREER OBJECTIVES

Short-term Goals

- Contribute to impactful AI/ML projects
- Expand expertise in advanced deep learning techniques
- Build production-grade ML systems
- Collaborate with experienced professionals

Long-term Vision

- Become a leading AI/ML expert

- Contribute to innovative AI solutions
 - Mentor aspiring ML engineers
 - Drive technological advancement through AI
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KEY DIFFERENTIATORS


1. **Full-Stack ML Development:** From data preprocessing to production deployment
 2. **Practical Implementation:** Portfolio of working projects demonstrating real-world skills
 3. **Academic Foundation:** Strong computer science background from recognized university
 4. **Community Engagement:** Active GitHub presence with multiple achievements
 5. **Continuous Learning:** Certified from Stanford and University of Michigan programs
 6. **Versatile Skill Set:** Backend APIs, desktop apps, and ML model development
 7. **Production Experience:** Docker, FastAPI, and deployment-ready solutions
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ADDITIONAL INFORMATION

Work Style

- Meticulous attention to detail
- Strong documentation practices
- Test-driven development approach
- Iterative improvement mindset
- Collaborative team player

Availability


-  Currently available for hiring
- Open to full-time positions
- Remote work capable
- Flexible with project-based work

Interests

- Artificial Intelligence advancement
 - Computer Vision applications
 - Deep Learning research
 - Open-source contribution
 - Technical writing and education
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READY TO COLLABORATE

I am passionate about leveraging AI and Machine Learning to solve real-world problems. With a strong foundation in computer science, hands-on experience in multiple ML projects, and a commitment to continuous learning, I am ready to contribute to innovative teams and challenging projects.

Let's build something amazing with AI! 

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