

Zahra Amini

Data Scientist | Machine Learning Lecturer

📍 **Location:** Shahr-e Babak, Kerman, Iran

Date of Birth: January 31, 1997 (11 Bahman 1375)

✉️ **Email:** amini75zahra@gmail.com

☎️ **Phone:** 09212964743

🌐 **LinkedIn:** [zahraamini-ai](#)

🌐 **Portfolio:** [GitHub](#) | [Kaggle](#) | [Hobot Academy](#)

SKILLS

Technical Expertise: Data Science, Data Engineering, Machine Learning, Deep Learning, NLP, Computer Vision, Bio-Signal Analysis

Programming Languages: Python, SQL, C++, Julia, R

Frameworks: TensorFlow, Pytorch, Keras, Scikit-Learn, Hugging Face Transformers, spaCy, NLTK, RegEx, OpenCV

Tools:

Development: Jupyter Notebook, Google Colab, VS Code, PyCharm

Version Control: Git, GitHub/GitLab

Databases: SQL Server, MongoDB, MySQL

Data Visualization: Microsoft Power BI, Tableau, Plotly/Dash

Cloud Platforms: Google Cloud Platform (GCP)

Deployment: Docker, Flask

Collaboration Tools: Notion, Scrum, Trello

Languages

- **Persian: Native or Bilingual**
- **English: Upper-Intermediate to Advanced (B2-C1)**
- **German: Beginner (A1)**

EXPERIENCE

National Iranian Copper Industries Co. , NICICO · Full-time

- **Data Scientist (Jan 2025 – Present)**

Hobot Academy (Aug 2024 – Present)

- **AI Applied Mathematics Lecturer**
 - Taught advanced mathematical concepts relevant to artificial intelligence, including linear algebra, probability, and optimization.
 - Designed curricula integrating theoretical concepts with practical implementations.
 - Skills: Python, Linear Algebra, Probability, Optimization, Teaching, Course Development
- **Python Programming Lecturer**
 - Delivered lectures covering Python programming from beginner to advanced levels, including OOP, data structures, and automation.
 - Skills: Python, Teaching, Data Structures, Object-Oriented Programming
- **Founder**

Filoger

- **Machine Learning Lecturer at NLP School**
 - Delivered comprehensive training in Natural Language Processing (NLP), focusing on theoretical foundations and practical applications.
 - Skills: Python, NLP, Transformers, Teaching, Teamwork, Data Analysis
- **Manager of Filoger Data Science School (Jan 2023 – Dec 2023)**
 - Supervised curriculum design, schedules, and activities for a data science training program.
 - Managed team projects bridging academia and industry needs.
 - Skills: Python, Data Science, Leadership, Curriculum Design, SQL
- **Lecturer (Guest) at Filoger Computer Vision School with Fanap Campus**
 - Delivered advanced training on digital image processing, convolutional neural networks (CNNs), and computer vision.
 - Skills: Python, Computer Vision, Deep Learning, CNNs, Digital Image Processing
- **Machine Learning Lecturer**
 - Taught foundational concepts of machine learning, focusing on hands-on problem-solving with real-world datasets.
 - Skills: Python, Machine Learning, Algorithms, Data Science, Teaching
- **TA at Data Engineering Bootcamp**
 - Guided participants in mastering data engineering concepts, including database management and data pipelines.

- **Skills: Python, MongoDB, SQL Server, Data Pipelines, ETL**

SmartEra Academy

- **Educational Administrator (Dec 2024- Present)**
- **Machine Learning Lecturer (Sep 2024 – Dec 2024)**
 - **Conducted comprehensive training on machine learning algorithms and applications using Python.**
 - **Skills: Python, Machine Learning, Data Science, Teaching, Team Collaboration**

GISDCO

- **Data Engineer (Apr 2018 – Oct 2019)**
 - **Developed and optimized ETL processes for integrating and transforming large datasets.**
 - **Analyzed and ensured data consistency for strategic decision-making.**
 - **Skills: SQL, Python, ETL Development, Data Analysis, Problem Solving**

PROJECTS

Natural Language Processing (NLP)

- **Language Modeling and Chatbot Development**
 - Designed and trained language models using transformer-based architectures for building conversational AI systems.
 - **Skills: Python, NLP, Transformers (e.g., BERT, GPT), TensorFlow/PyTorch, Data Preprocessing, Fine-tuning**

Computer Vision

- **Plate Detection and Object Tracking**
 - Developed pipelines for real-time license plate detection and object tracking using deep learning techniques.
 - **Skills: Python, OpenCV, YOLO, TensorFlow, Object Detection**
- **Image Captioning**
 - Built models to generate descriptive captions for images using encoder-decoder frameworks with attention mechanisms.
 - **Skills: Python, TensorFlow/PyTorch, CNNs, RNNs, Attention Mechanisms**
- **Left Ventricle Segmentation**
 - Implemented segmentation models for medical imaging to analyze left ventricle boundaries.
 - **Skills: Python, Medical Image Analysis, U-Net, Deep Learning, Data Annotation**
- **Text-to-Image Search**

- Created a search engine to retrieve images based on textual descriptions using multimodal embeddings.
- **Skills:** Python, Multimodal Learning, Transformers, Text and Image Embedding

Bio-Signal Analysis

- **ECG Signal Analysis**
 - Developed algorithms for detecting anomalies and irregularities in ECG signals for health monitoring.
 - **Skills:** Python, Signal Processing, SciPy, NumPy, TensorFlow
- **EEG Signal Analysis: Predicting Neonatal Seizures**
 - Designed deep learning models to predict epileptic seizures in neonates using EEG signal patterns.
 - **Skills:** Python, EEG Analysis, Deep Learning, Feature Engineering, Time-Series Analysis

Recommendation System

- **Course Recommendation System**
 - Developed a personalized recommendation system to suggest relevant courses for an educational website.
 - **Skills:** Python, Recommender Systems, Collaborative Filtering, Content-Based Filtering, SQL

EDUCATION

Sirjan University of Technology

- *Bachelor's in Computer Software Engineering* (Sep 2015 – Sep 2020)

National Organization for Development of Exceptional Talents (SAMPAD)

- *High School Diploma in Mathematics* (Sep 2011 – Sep 2015)

ACHIEVEMENTS

- **AI Activist in Social Media:** Actively promoting artificial intelligence awareness and education through social platforms such as LinkedIn, GitHub, Kaggle, YouTube, and other channels.
- Successfully managed and taught various bootcamps in AI, Machine Learning, and NLP.
- Delivered hands-on training to aspiring AI professionals, bridging academic concepts with practical industry applications.
- Kaggle Notebook ranked in the Top 70.

RECOMMENDATIONS

تاریخ: _____

شماره: _____

پیوست: _____

بیتالی



دانشگاه صنعتی شریف

October 30, 2024

To whom it may concern:

To Whom It May Concern:

I am writing to recommend Ms. Zahra Amini for graduate study at your university. I have had the pleasure of knowing Zahra as a colleague for one year.

Zahra possesses a comprehensive understanding of machine learning techniques and a strong ability to communicate complex technical concepts in a clear and engaging manner. She has consistently demonstrated a talent for using interactive methods and practical examples to enhance student learning. As a result of her effective teaching style and dedication to her students, Zahra has received positive feedback from students who have praised her ability to make complex topics accessible and interesting. Beyond her academic abilities, Zahra is a highly organized, responsible, and effective communicator. She has a strong work ethic and is always eager to take on new challenges. I am confident that she will be a valuable asset to your program. I highly recommend Zahra Amini for a graduate student position. Please do not hesitate to contact me if you have any further questions.

Sincerely,

Yours sincerely

Hossein Sameti

Associate Professor,

Sharif U. of Tech.,

Tel: (+98) 21 6616-6637

Email: sameti@sharif.edu

URL: <http://sharif.edu/~sameti>

Mahmoud Alipour

Head of ADAS group

JETCO (blongs to IKCo)

09/October/2024

To whom it may concern,

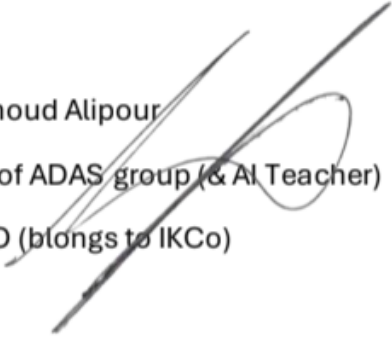
I am Mahmoud Alipour a faculty member at Filoger Artificial Intelligence Company and Head of ADAS Group of JetCo, and I have had the opportunity to work closely with Ms. Zahra Amini as a Teaching Assistant (TA) for several advanced courses, including Python, Deep Learning, Data Science, Artificial Intelligence, Machine Learning, and Computer Vision since January 2022. During this time, Ms. Amini has consistently demonstrated exceptional dedication, technical skills, and a high level of responsibility in supporting both the students and the academic process.

As a Teaching Assistant, Ms. Amini took on a variety of tasks, including but not limited to:

- **Assisting with Lectures:** Collaborating in delivering and reinforcing advanced topics to students, as well as addressing their questions during lectures and tutorial sessions.
- **Designing and Conducting Problem-Solving Sessions:** Leading review and practical problem-solving sessions, which significantly improved students' understanding of complex concepts.
- **Grading and Assessment:** Evaluating student assignments and projects with great precision and providing constructive feedback, contributing to their growth in practical skills.
- **Creating Educational Resources:** Assisting in the development and refinement of educational materials, including lecture slides, sample code, and exercises, enhancing the overall quality of the course content.
- **Advising and Supporting Students:** Offering academic guidance and technical support to students on their projects and research, helping them overcome complex challenges. - **Coordinating Classes and Sessions:** Managing Q&A sessions and ensuring smooth scheduling and execution of course timelines.
- **Organizing Practical Workshops:** Helping to organize and lead practical workshops on various advanced technologies, enabling students to progress in their academic and professional development.

Ms. Amini performed all of these duties with outstanding efficiency and precision. Her ability to manage multiple tasks simultaneously and work closely with both colleagues and students significantly enhanced the learning experience and contributed to the success of the courses. Therefore, I wholeheartedly recommend Ms. Amini for any academic or professional opportunities in related fields. I am confident that she will continue to excel in any field related to Artificial Intelligence, and I am certain that Ms. Amini will achieve further success in all her endeavors.

Sincerely,



Mahmoud Alipour
Head of ADAS group (& AI Teacher)
JETCO (blongs to IKCo)

Mahmoudalipour.a@gmail.com

00989901228192

Subject: Confirmation of Membership for Zahra Amini

This is to certify that Ms. Zahra Amini has been working as a Lecturer at Filoger Artificial Intelligence Company since October 1, 2020.

During this period, she has successfully undertaken various responsibilities including:

- Teaching and conducting educational classes in Artificial Intelligence, Data Science, Machine Learning, Deep Learning, and Natural Language Processing.
- Preparing and organizing educational materials and resources.
- Assisting with the development of the curriculum.
- Evaluating and grading student assignments and projects.
- Advising and guiding students in academic and research matters.
- Designing and implementing educational courses related to Data Science.
- Supervising the educational performance of students.
- Mentoring students in Artificial Intelligence projects.

Throughout her tenure, Ms. Amini has consistently performed her duties with diligence, precision, and a high level of commitment, contributing significantly to the enhancement of the scientific and educational standards of the institute. Her collaborative spirit and strong interpersonal skills are among her outstanding qualities.

Given her experience and capabilities, we believe that this educational opportunity will be a significant and beneficial step towards Ms. Amini's professional development. Therefore, we fully endorse her for any academic or professional position and wish her continued success.

Warm regards,
Pooria Haddad
Head of Filoger Artificial Intelligence Company



Address: Keshavarz neighborhood, Saeed Kabkanian St.,
Reza Firoz Dehghan Alley (8), No. 30, second floor

Phone Number: +989125499724



www.filoger.com