ALI AHMADI

MASTER STUDENT AT ECOLE NORMALE SUPERIEURE PARIS SACLAY AND UNIVERSITY OF PADOVA

LINKEDIN **KAGGLE** ***GITHUB*** ***RECOMMENDATION LET***

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INTEREST

Research Interest: Machine learning, Deep learning, Computer vision, IoT, Robotic, Game Theory, Embedded systems, NLP, Reinforcement Learning, Time Series
Languages Skills: **Python** (Pandas, NumPy, Pytorch, Pinocchio, OpenCV), **C**, C++, **Pspice**, MATLAB, TensorFlow, statistics, Open Source, GitHub

Soft Skills: Leadership, Teamwork, Networking, adaptability, creativity, Resourcefulness

PROJECTS

* Applying **Generative Network (GAN)** to generate famous French painter paintings (Claudio Monet) image style *(Kaggle challenge)*

*Study and explore the limitation of **TROCR image to text** deep learning model *(internship)*

* **Classification of lymphocytosis**, distinguishing between reactive and tumoral cases using Deep learning *(Kaggle challenge)*
* Implementing **Image classification** with Resnet50 model *(Kaggle challenge)*
* Study and review **Reinforcement learning paper** for legged robots
*Implementing some **Machine learning and computer vision** projects during my courses
*I did **freelance programming** during COVID
*Implementing a portable device which measure temperature by Tem sensor and sending data via Bluetooth and showing in the application in the phone with **ARM Microcontroller** (Bachelor Thesis)
*Implementing pulse sensor using **Arduino microcontrollers** and LCD

EDUCATION

***ENS PARIS SACLAY UNIVERSITY • 2023-2024 • MASTER OF MVA (EXCHANGE)**
Course: Deep learning, Deep learning for medical images, robotic, Fundamentals of reproducible research and free software
Thesis and Short Internship

***UNIVERSITY OF PADOVA-ITALY • 2021-2024 • MASTER OF ICT IN INTERNET AND MULTIMEDIA**
Course: Game theory, IoT, Machine learning, Network science Artificial Intelligence, Embedded Real-time control

***FERDOWSI UNIVERSITY OF MASHHAD • 2016-2021 • BACHELOR OF ELECTRONIC ENGINEERING**
***UNIVERSITY OF TEHRAN • 2021-MASTER OF ELECTRONIC ENGINEERING • ABONDON**

EXPERIENCE AND AWARDS

***INTERN: USING DEEP LEARNING FOR CONTROLLING EXOSKELETON ROBOTS • ROBOTIC LABS OF ENS PARIS SACLAY (LURPA) & CIAMS LAB • 2024**
APPLYING NN ON CONTROLLERS OF EXOSKELETON ROBOTS FROM APRIL TO AGUEST 2024

***INTERN IN COMPUTER VISION (OCR) • CENTRE BORELLI, ENS PARIS SACLAY • 2023**
WORKING ON DETECTING SCENE TEXT VIA INSTANCE SEGMENTATION AND OCR MODEL

***TEACHING ASSISTANT • FERDOWSI UNIVERSITY • 2018 • 2019**
Teaching Assistance in the course of C/C++ Programming for Bachelor students of the year 2019 the Ferdowsi University

***INTERN • IRAN POWERPLANT REPAIRS COMPANY • SUMMER 2019**

***TOP RANKING (TOP 0.1%) IN IRANIAN UNIVERSITY ENTRANCE NATIONAL EXAM**

***KHARAZMI YOUTH STUDENT CREATION AWARD WITH THE IDEA OF A CAR THAT WORKS WITH RENEWABLE FUELS**

CERTIFICATES

***Introduction to Generative AI by GOOGLE CLOUD**
https://coursera.org/share/7ccc5cef1013ed67c8331a39007705b5
***Image Processing with Python** - Coursera
coursera.org/verify y/D8VGPSMJGAF8
***Certificate of achievement - ICPC - International Collegiate Programming**
***Introduction to the Internet of Things and Embedded Systems by University of California, Irvine** Coursera coursera.org/verify/3BWSM7JQS72L
* **The Raspberry Pi Platform and Python Programming for the Raspberry Pi by University of California, Irvine** - Coursera
coursera.org/verify/KZR9N75AXHUV
* **CNC Programming course** - Iran Technical & Vocational Training Organization

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Gif-sur-Yvette, December 14, 2024

Recommendation Letter

Dear members of the recruitment jury for a Phd thesis,

It is with great pleasure that I write this letter of recommendation for Ali Ahmadi, who completed his Master thesis under my supervision at the LURPA Laboratory of ENS Paris-Saclay. As the Head of LURPA, I had the opportunity to closely observe Ali's work, and I strongly support his application for a PhD or research position.
During his time with us, Ali worked on a challenging and innovative thesis project focused on training reinforcement learning agents using deep learning models, specifically LSTM architectures, to simulate and improve exoskeleton movements. The goal was to make these movements smoother and more efficient—a critical problem in robotics and assistive technologies. His work showed a great balance of theory and practical application, demonstrating his ability to connect complex ideas with real-world problems. The simulation results generated from real data from the exoskeleton gave very encouraging results.
Beyond his seriousness, Ali Ahmadi is a persevering student who does not shy away from difficulty and is motivated by research. In addition, he is a sociable and respectful student who is perfectly capable of working in a team.
All of these reasons make me think that Mr. Ali AHMADI has all the intellectual and human qualities to continue his academic career with a Phd thesis.

Pr. Olivier BRUNEAU
Gif-sur-Yvette, December 14, 2024

Professeur Olivier Bruneau
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Dr. Miguel Colom
Enseignant-chercheur
Centre Borelli, ENS Paris-Saclay

To Whom It May Concern,

I am writing to offer my enthusiastic recommendation for Mr. Ali Ahmadi, who has recently completed a research internship at Center Borelli, ENS Paris-Saclay University, under my supervision. During this internship, Ali worked on the project *"Improving an Existing OCR System with State-of-the-Art Methods"* in the context of the EuropeanHORIZON project VERA.AI. He showed thorough dedication, technical skills, and the ability to contribute with innovative ideas.

Ali's project focused on studying, researching, and testing different text detection and text recognition models, particularly OCR and TrOCR. His work involved a comprehensive evaluation of these models to explore their limitations and efficiency. Ali demonstrated a good understanding of deep learning frameworks and computer vision techniques. Ali's ability to quickly learn and apply new technologies was a significant asset to our team.

Ali also showcased excellent programming skills, particularly in Python, and demonstrated proficiency with deep learning libraries such as TensorFlow and PyTorch and Computer vision libraries such as OpenCV.

In addition to his technical competencies, Ali exhibited exemplary teamwork and communication skills and participated actively in our group discussions,

Ali's passion for artificial intelligence and computer vision, coupled with his adapted academic background, makes him an ideal candidate for a PhD or research position. I am confident that Ali will excel in any research or academic position he pursues and I strongly recommend him to this purpose.

Please feel free to contact me if you would like to discuss with me.

Sincerely,
Miguel Colom

DIPARTIMENTO
DI INGEGNERIA
DELL'INFORMAZIONE

UNIVERSITÀ
DEGLI STUDI
DI PADOVA

Padova May 25th, 2023

To Whom who is concerned

I had the opportunity to meet Mr. Ali Ahmadi when he attended the course "Embedded Real-Time Control", held by myself at the University of Padova (Italy), in the academic year 2021/2022. Mr. Ahmadi showed to be really interested in the course lectures, especially in the laboratory ones, which were mostly focused on the practical application of STM32 microcontrollers, including programming for the development of semi-autonomous mobile robots.

He passed the exam of course with a mark of 29/30.

Based on my personal experience and Mr. Ahmadi's academic record, I believe that his participation in the Erasmus program at ENS Saclay Paris University will not only contribute positively to the academic institution but also provide him with invaluable learning opportunities and cultural experiences.

Sincerely,

Prof. Alberto Morato