# Nima chaharbaghi

✉ nimachaharbaghi@gmail.com   📍 PARIS, FRANCE   in Nima chaharbaghi

Education

Master's degree, IEMDP Wireless telecommunication and iot systems   2025 – Present
Isep - École d'ingénieurs du numérique Isep   PARIS, FRANCE
double degree student

Master of Science in Telecommunications Engineering   2024 – present
UNIVERSITY OF BOLOGNA (UNIBO) ☑   BOLOGNA, ITALY
CGPA:28.6/30

Bachelor of Science in Electrical Engineering   2019 – 2023
ISFAHAN UNIVERSITY OF TECHNOLOGY (IUT) ☑   ESFAHAN, IRAN

Interests

- Machine Learning
- Computer Vision
- Image Processing
- Signal Processing
- Networks
- 5G

Projects

Secure Video Transmission System Using H.264 and AES Encryption   2024
- Designed a system to receive and decode transport stream data transmitted in H.264 format.
- Applied Advanced Encryption Standard (AES) to secure video streams, preventing unauthorized access.
- Implemented decryption for both AES and H.264 encoded data to ensure smooth video playback.
- Analyzed data flow, encryption, and decryption processes to optimize security and performance.

Fast and Accurate Human Detection with HOG   2024
- Successfully applied HOG feature descriptor for human detection, showcasing expertise in computer vision techniques.
- Optimized the algorithm for efficient processing and accurate detection of human figures in various scenarios.
- Demonstrated strong problem-solving skills by overcoming challenges in feature extraction and classification to achieve reliable results.

Real-Time Hand Gesture Recognition Using mmWave Radar (Final Year Project)   2023
- Designed and implemented signal processing algorithms to extract gesture features.
- Utilized machine learning techniques to classify and interpret hand gestures accurately.
- Integrated the system with user interfaces for practical applications.

Implementing Effects of AWGN on Constellation, Constant Complex Channel Gain, and Multipath Channel using MATLAB   2023
- Utilizing Gray code for constellation point mapping to enhance error resilience.
- Generating random binary sequences and mapping them to complex constellations.
- Evaluating signal power and noise power for different Signal-to-Noise Ratios (SNR).
- Applying complex Gaussian noise to simulate real-world channel conditions.
- Investigating the impact of constant complex channel gain on signal constellations.

OpenStack Local Development in Virtualbox   2022
- Successfully set up Virtualbox, Ubuntu Server VM, and utilized DevStack for OpenStack installation.

- Developed Python scripts to effectively interact with the OpenStack cloud, showcasing proficiency in virtualization, system configuration, and cloud resource management.

WORK EXPERIENCE

Isfahan university of technology IT center 2022/07 – 2022/09
Internship Experience: Network Manager ESFAHAN, Iran
- earned the Linux LPIC1 certification, enhancing my Linux administration skills and open-source technology expertise.
- achieved the CCNA (Cisco Certified Network Associate) certification, validating my networking knowledge and troubleshooting abilities.
- became proficient in OpenStack, contributing to cloud computing and virtualization projects, which improved resource allocation efficiency.

Research Assistant, WiLab – University of Bologna 2025
In collaboration with Northeastern University, I contributed to the deployment and testing of a Bologna, Italy
5G system. Key accomplishments include:
- Configured and tested the Radio Access Network (RAN) using the OpenAirInterface framework.
- Worked within an OpenShift-based environment to manage system components and ensure stable operations.
- Supported integration and troubleshooting efforts to improve network reliability and performance.

VOLUNTARY ACTIVITIES

Head Staff, Robo_IUT 2021 – 2023
As the Head Staff of Robo_IUT, I provided dynamic leadership for three years in a renowned robotic competition. During my tenure:

- Successfully managed and coordinated multiple robotic competitions, fostering innovation and teamwork among participants.
- Implemented strategic improvements, resulting in increased participation and engagement in the event.
- Demonstrated strong organizational and leadership skills by overseeing event logistics, sponsorship, and budget management.

LANGUAGES

English
IELTS (04/Sep/2023): Overall 6.5 (L7 R6.5 W6 S6.5)
TRF Number: 23IR002496CHAN026A

Persian
[*Native*]

French
[*Basic*]

Skills

Matlab	Python
C++	LaTeX
FPGA (vhdl)	Opencv
5G	Computer networks