Salim Benhamadi Machine Learning Engineer

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07/2021 - 08/2022

Tunis, Tunisia

EDUCATION	
 Master's Degree ICT Internet and Multimedia Engineering, Università degli studi di padova (UNIPD) Principal coursework: Computer Vision, Internet, Game Theory, Internet of Things and Smart Cities, Natural Language Processing, 	10/2023 – 02/2025 Padova, Italy
Erasmus+ Student Mobility, Università degli studi di padova (UNIPD) • Principal coursework: Machine Learning, Neural Networks and Deep Learning, Reinforcement Learning, Human data analytics, Scientific Computing with Python.	09/2022 - 07/2023 Padova, Italy
 ICT Engineer's degree, Higher School of Communications of Tunis (SUP'COM) Principal coursework: Probability, Statistical inference, Algorithmic Foundations of Optimization, Cloud, Big Data, Data Science, Artificial Intelligence. 	09/2020 – 07/2023 Ariana, Tunisia
Pre-engineering studies in Mathematics and Physics, Preparatory Institute For Engineering Studies of Nabeul (IPEIN) ∅	09/2018 - 07/2020 Nabeul, Tunisia
WORK EXPERIENCE	
 Master Thesis Intern, Infineon Technologies Developed an image clustering tool with anomaly detection, significantly reducing data analysis and processing time. Automated workflows by creating a tool for automatic report generation, improving efficiency and accuracy. Created a Python library to facilitate the reading and analysis of production data. Keywords: Unsupervised Learning, Anomaly Detection, Dimensionality Reduction, Workflow Automation, Report Generation. 	02/2023 – Present Padova, Italy
 Research Trainee, University Of Padova Analyzed head and hand motion data, along with traffic data from VR headset experiments, to predict and identify users across different VR Games. Conducted comprehensive data preprocessing and feature engineering, achieving model accuracy 95%. Keywords: Supervised Learning, User Identification, Data Preprocessing, Feature Engineering. 	10/2023 – 10/2024 Padova, Italy
 Data Scientist, Intern, PROROB SRL Ø Analyzed large sets of manufacturing data using Python to identify patterns and trends. Performed predictive analysis and anomaly detection on Key Performance Indicators (KPIs), identifying potential issues and reducing downtime by 10%. Keywords: Multivariate Statistics, Exploratory Data Analysis, Time Series Analysis, Time Series Forecasting, Anomaly Detection. 	02/2023 - 07/2023 Vicenza, Italy
 Machine Learning Engineer, Intern, Plxemantic ∅ Built an automated system for extracting data from financial statement using OCR. 	06/2022 – 08/2022 Tunis, Tunisia

• Prevented manual data entry errors with high quality data extraction on balance sheets.

Keywords: Python, Tensorflow, OpenCV, OCR, PaddleOCR, Layoutparser

Software Developer, Intern, eDonec ⊗

• Participated in planning, developing, testing, and maintaining an eCommerce website..

• Maintained quality assurance through code testing and cross-browser testing.

Leveraged Knowledge: React, CSS/HTML, Redux, Jest unit testing, MongoDB, Bootstrap, NodeJS, ExpressJs

Movement- and Traffic-based User Identification in Commercial Virtual Reality Applications: Threats and	17/01/2025
Opportunities, IEEE VR 2025 ♂	

PUBLICATIONS

Investigated user identification methods in virtual reality through movement patterns and network traffic analysis, examining both security implications and potential applications for personalized VR experiences.

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TWIRDS	
Ranked 19/365 in Microsoft Learn Location Mention Recognition Challenge, Microsoft, HBKU	08/2024
Ranked 18/514 in AirQo African Air Quality Prediction Challenge, AirQo	06/2024
Ranked 14/719 in the Faulty Air Quality Sensor Challenge, UmojaHack Africa 2022	03/2022
2nd prize at ML Olympiad - Preserving North African Culture, Google Developers	03/2022
2nd prize at GO Data Science (GODS), IEEE ENSI Student Branch	02/2022
1st prize at DevFest21, Google Developer Groups Carthage	02/2022

SKILLS

Programming

(Proficient) : Python (Familiar) : C, C++

Database

MySQL, SQL Server, Firebase, MongoDB

Data Tools

TensorFlow, PyTorch, Keras, FastAI, Scikit-Learn, Numpy, Pandas, Matplotlib, Seaborn,

Soft Skills

Communication, Problem Solving, Teamwork, Attention to Detail

Machine Learning

Supervised & Unsupervised Learning (Regression, Classification, Clustering, Anomaly Detection), Deep Learning (CNN, RNN, ANN, Transformers), NLP & Large Language Models (Text Classification, Named Entity Recognition, Embeddings), Reinforcement Learning, Optimization (Gradient Descent, Hyperparameter Tuning)

LANGUAGES

Arabic — Native (C2) ● English — Full professional proficiency (C1), TOEFL 85/120 point (2023) ● French — Limited working proficiency (B1)