

ISSAM JEBNOUNI

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SKILLS

Deep Learning, Image and video Processing, Computer Vision, Linux, Python, Flask, Streamlit, OpenCV, Tensorflow, Keras, scikit-learn, Pandas, Numpy, Matplotlib, Seaborn, Pillow, YOLOv8, mediapipe, Nvidia TAO Toolkit, Docker.

EDUCATION

NATIONAL INSTITUTE OF APPLIED SCIENCES AND TECHNOLOGY

North Urban Center, Tunis

Master of Science

Expected Sep 2024

Major in Computer Science; **Minor** in Image and Video Processing.

Relevant Coursework: Machine learning, Deep Learning, Image and Video Processing, Big Data, Business Intelligence, Linux.

WORK EXPERIENCE

DATADOIT

Manouba, Tunis

Computer Vision Intern

Jul 2023 – Aug 2023

- Developed a web application with Flask which scans multiple camera streams in the local network and displays them.
- Experimented with and benchmarked multiple object detection models in the Nvidia TAO Toolkit.
- Trained YOLOv8 model on the same task using a mixture of synthetic and real data and validated on real data only. Using this approach achieved 96% validation mAP50.

PROJECTS

YOLOv8 OBJECT DETECTION FOR FOOTBALL

Self-initiated project

- Fitted a YOLOv8 object detection model on a custom football dataset featuring four classes, achieving 86% mAP50 on the validation set after 25 epochs.

FACIAL VERIFICATION MODEL USING A SIAMESE NETWORK

Self-initiated project

- Crafted a training dataset, incorporated data augmentation to expand it to 3000 images.
- Built a Siamese neural network, tailored for comparing similarities using Tensorflow's Functional API that yielded remarkable average recall and precision on the test set: 99% and 100% respectively.

ARABIC WORD-LEVEL SIGN LANGUAGE RECOGNITION MODEL

End of Year project

- Extracted Hand and Pose Keypoints from sign videos of 100 arabic words using Mediapipe's Holistic Model.
- Trained a BiLSTM model on the extracted features and achieved 99.62% accuracy on test data.

CERTIFICATIONS

[Python Programmer Career Track](#), [Data Scientist Career Track](#), [Machine Learning Specialization](#)

EXTRACURRICULAR ACTIVITIES

IEEE INSAT STUDENT BRANCH

Gammarth, Tunis

Head of Sponsorship of the IEEE R8 SYP Congress

Feb 2022 – Aug 2022

- Organized the IEEE EMEA Region Student and Young Professional Congress in Tunisia that attracted 200 participants.
- Raised approximately 30,000\$ from local and international sponsors to fund the congress.

IEEE COMPUTER SOCIETY CHAPTER INSAT

North Urban Center, Tunis

General Secretary

Sep 2021 – May 2022

- Scheduled and coordinated meetings of an 8-people executive board, ensuring efficient operation of the chapter.
- Supported the organization of 3 significant events, contributing to their successful execution.

IEEE COMPUTER SOCIETY CHAPTER INSAT

North Urban Center, Tunis

Ambassador / Project manager of the fifteenth edition of the international hackathon IEEEExtreme

Apr 2021 – Oct 2021

- Served as one of 700+ ambassadors around the world to communicate essential information to my student branch.
- Managed a committee to organize a highly successful edition of the hackathon, attracting 160 participants.