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.

EDUCATION

NATIONAL INSTITUTE OF APPLIED SCIENCES AND TECHNOLOGY

North Urban Center, Tunis Expected Sep 2024

Engineering Degree

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 IEEEXtreme

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.