Taha Khamessi

• Ben Arous, Tunisia

 \square taha.khamessi@gmail.com

**** +216 96484521

𝚱 khamessitaha.github.io

in taha-khamessi-396aba1a3

• khamessiTaha

Education

The Higher Institute of Information Technologies and Communication - ISTIC

Sept 2022 - May 2024

BS in Computer Science

o GPA: 3.7/4.0

• Coursework: Software Engineering and Information Systems

Preparatory Institute for Engineering Studies of Nabeul - IPEIN

Sept 2019 - April 2022

Undergraduate Degree

• Coursework: Mathematics and Physics

Experience

Software Developer Intern - AI & Mobile Development(End of Study Internship) Maghreb Code Multimedia

Tunis, Tunisia

Feb. 2024 - May. 2024

- Developed a mobile app with high-speed recognition, allowing users to upload or capture car images, with classification and price prediction completed in under 2 seconds.
 - Implemented a robust AI model that achieved a 70% test accuracy for car model classification, leveraging the DVM-CAR 2.0 dataset of 1.45 million vehicle images.
 - Balanced the model by augmenting underrepresented classes, enhancing accuracy across 899 car models.
 - Reduced data processing demands by implementing data chunking and transfer learning, optimizing model training time by 40%.
 - Integrated predictive pricing functionality based on historical and real-time data, improving user insights for car valuation.

Network Security Intern

Tunis, Tunisia

Agence Tunisienne de la Formation Professionnelle

Jul. 2023 - Aug. 2023

 Configured and optimized Fortinet firewalls to enhance network security protocols, supporting comprehensive systems administration tasks.

Projects

CosmicVue (NASA Space Apps Challenge)

Github Repo

- Developed an interactive web application for solar system simulation, selected as a Global Finalist in the 2024 NASA International Space Apps Challenge (top 40 out of 10,000+ teams). Integrated Near-Earth Objects tracking with innovative celestial body visualization.
- o Tools Used: React, Three.js, Python, Netlify

CarVision (End of Study Project)

Github Repo

- Developed a deep neural network using TensorFlow to recognize and classify cars from images and predict their prices, trained on the "DVM-CAR 2.0" dataset. Created a mobile app with Flutter Node.js and MongoDB, integrating the model for real-time use.
- o Tools Used: Flutter, Node.js/Express.js, MongoDB, TensorFlow/TensorFlow Lite, Keras, Google Colab Notebook

Collaborative Code Editor

Github Repo

- Developed a full-stack, real-time collaborative code editor allowing users to create rooms for coding sessions and collaborate with instant synchronization across participants. Implemented a responsive front end for an engaging user experience and a robust back end for efficient server communication. Integrated real-time updates, user authentication with Google account sign-in, and an in-room messaging feature for seamless communication during coding sessions.
- o Tools Used: React, Firebase Auth, Firestore DB, Firebase Hosting

Skills & Certifications

- o Programming Languages: JavaScript, Python (Advanced), Java
- AI/ML Technologies: TensorFlow, Keras, OpenCV, Transfer Learning, Computer Vision
- Web & Mobile: React.js, Node.js, Firebase, MongoDB, HTML/CSS, THREE.js, RESTful APIs, Spring Boot, Flutter, MySQL, Angular
- o Developer Tools: Git/Github, Linux, Postman, CI/CD, VS Code
- o Certifications: Machine Learning Specialization (DeepLearning.AI, 2024), Python for Data Science & AI (IBM, 2020)