Ichrak Hamdi

Computer Science Engineer - Machine Learning Enthusiast

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Summary

Computer Science Engineer with a **specialization in Artificial Intelligence**. Simultaneously completed a **Research Master's Degree** in Smart Systems with high honors. Proficient in machine learning, deep learning, and computer vision. Passionate about advancing AI in the medical field through dedicated and continuous learning.

Education

National School of Computer Science (ENSI) — **2022 – 2023**
Research master's degree in Smart Systems — *University of Mannouba*

National School of Computer Science (ENSI) — **2020 – 2023**
National Engineering Degree in Computer Science,specialty Artificial Intelligence — *University of Mannouba*

Preparatory Institute for Engineering Studies of Bizerte(IPEIB) — **2018 – 2020**
Preparatory Cycle Math-Physics — *University of Carthage*

Experience

Artificial Intelligence Research Engineer Intern — **Mar 2023 — Aug 2023**
University of Quebec in Abitibi-Témiscamingue(UQAT) — *Rouyn Noranda,Canada*

- Initiated and managed advanced optimization of winter maintenance, emphasizing sidewalk snow removal.
- Amplified decision-making capabilities by refining snow removal route datasets.
- Enhanced the effectiveness of combining the exploration capabilities of a Hybrid Genetic Algorithm with local search techniques to minimize resource allocation and maximize operational efficiency.
- **Key words:** Machine Learning, Operational Research, Hybrid Genetic Algorithm, Genetic Algorithm, Local Search.

Artificial Intelligence Intern — **Jul 2022 — Aug 2022**
Talan Tunisia — *Tunis,Tunisia*

- Led the development of a distributed architecture for a pioneering metaverse initiative.
- Conducted extensive research into body tracking algorithms and motion detection techniques, enriching our understanding and enhancing system performance.
- **Key words:** Metaverse, 3D design, Unity, AI, Blockchain, DAO.

Projects

Facial Emotion Detection — **Jan 2023 - Mar 2023**

- Developed an artificial intelligence system to detect and analyze human facial expressions in real-time. The project involved image processing, machine learning, and data analysis.
- Collaborated in a two-person team, managing tasks and conducting weekly progress reviews.
- **Technologies:**Python,OpenCV,TensorFlow.
- **Github:** ⬤ ichrakhamdi/Facialemotiondetection

Movie Sales Visualization — **Sep 2022 - Nov 2022**

- Collected and cleaned movie sales data from IMDB, creating a comprehensive dataset for analysis.
- Developed a dynamic dashboard in Power BI to track and visualize movie sales trends and patterns.
- **Technologies:** Python, Power BI.
- **Github:** ⬤ ichrakhamdi/MoviesdashboardPowerBI

Segmentation of medical image (Design and Programming Project) — **Feb 2022 – May 2022**

- Developed a web application for comparative study of Machine Learning segmentation algorithms, facilitating enhanced breast cancer screening.
- Utilized Python, Django, U-Net, FCM, and EM technologies to implement and optimize the segmentation process.
- Collaborated with a team member to manage tasks and led weekly evaluations for timeline adherence.
- **Technologies:** Python, U-NET ,FCM,EM, Django.
- **Github:** ⬤ ichrakhamdi/mammogramsegmentation