Taha Koleilat

LinkedIn, GitHub, Website

EDUCATION

Concordia University

Montreal, QC

PhD in Electrical and Computer Engineering

May 2024 - Present

Concordia University

Montreal, QC

MSc in Electrical and Computer Engineering

Sept. 2023 - Apr. 2024

Email: tahakoleilat@gmail.com

- o Thesis: MedCLIP-SAM: Bridging Text and Image towards Universal Medical Image Segmentation
- Relevant Courses: Medical Image Processing, Applied Machine Learning and Evolutionary Algorithms, Biological Signal Processing, Deep Learning

American University of Beirut

Beirut, Lebanon

BEng in Computer Engineering; Minor in Economics; GPA: 4.0/4.0; High Distinction

Aug. 2019 - May 2023

- o Thesis: Covid-19 Indoor Access Rules Verification using ML (Won Dean's Award for Creative Achievement)
- Relevant Courses: Introduction to Machine Learning, Cryptography and Network Security, Software Engineering, Advanced Optimization Techniques

EXPERIENCE

Aritificial Intelligence Engineer

Apr. 2024 – Present

New York, USA

 $Radical\ AI$

- o Dev Environment: Leveraging technologies such as OpenAI and Google Gemini for developing AI tools
- Workflows: Developing ReX, an AI Coach who serves as a steadfast career companion for learners, offering personalized coaching, mentorship, and support throughout the various phases of their career lifecycle

Graduate Research & Teaching Assistant

Sep. 2023 – Present

Concordia University; IMPACT and Health-X Labs

Montreal, QC

- Research Objective: Investigating novel methodologies for Deep Learning in Medical Applications
- o Model Training: Implementing Multimodal Language-Image Networks for Biomedical Data Representation
- o Image Segmentation: Developing data-efficient segmentation methods for medical images through pseudo-masks

Research Intern

May 2022 – Oct. 2022

Queensland University of Technology; Trusted Networks Lab

Brisbane, Australia

- Research Objective: Developing a novel Consensus Protocol for Supply Chain Scenarios utilizing Email services
- **Application Development**: Developing a dApp integrating Email services with deployed Solidity Smart Contracts to automate the voting process
- **Performance Evaluation**: Experimentally evaluating gas efficiency and response time in a hypothetical scenario involving multiple Stakeholders

PROJECTS

- AUBCOVAX: Developed an Android mobile application using Android Studio and Java to handle COVID-19 data for faculty, staff, and students through MongoDB.
- ChainMed: Implemented a secure medical record system using IPFS and Quorum Blockchain, ensuring confidentiality through encryption protocols, integrity, and availability of EMR's through decentralization.
- Facial Expression Recognition: Implemented explainable emotion recognition, utilizing techniques like Shapley value interpretation. Deployed on OpenCV for Real-time Recognition via a Python Flask Web Server.

SKILLS

Languages: Java, Python, C/C++, SQL, JavaScript, Solidity, R, LATEX

Frameworks: PyTorch, TensorFlow, Django, Flask

Developer Tools: Git, Docker, Google Cloud Platform, Overleaf, Visual Studio, PyCharm, IntelliJ, Eclipse, Excel

Libraries: OpenCV, Scikit-learn, pandas, NumPy, Matplotlib