

Mehdi Lamouchi

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Relevant Links: [LinkedIn](#) | [GitHub](#) | [Google Scholar](#)

Programming Languages: Python, HTML/CSS, JavaScript, SQL.

Technologies/Frameworks: AngularJS, ReactJS, AWS, Google Cloud, Docker, Adobe XD, Figma.

Languages: English, French, Arabic.

EDUCATION

Lakehead University, Thunder Bay, Canada

May 2021

- Honors Bachelor of Science in Computer Science (Graduated with First Class Standing).
- Graduated with a Certificate in Entrepreneurship from the Faculty of Business at the same university.

EXPERIENCE

SChain Health

Remote

Business Analyst Intern

Oct 2023 - December 2023

- Proactively engaged in cold calling to identify and document potential business opportunities for the company.
- Developed comprehensive presentations that effectively communicated identified opportunities to the management team.
- Identified and communicated pain points experienced by end users, facilitating swift problem resolution and enhancing the Software Development Life Cycle (SDLC) process.
- Orchestrated all necessary steps in the grant acquisition process, demonstrating a strategic approach to securing funding.
- Effectively managed projects by navigating the complexities of regulatory compliance, showcasing a commitment to quality and adherence to industry standards.
- Created and delivered impactful presentations to the management team, translating complex Medicare data into actionable information.

Lakehead University

Thunder Bay, ON

Graduate Teaching Assistant

September 2021 - September 2023

- Assisting Professors in preparing lectures, teaching and delivering tutorials for an average of 55 students per classroom.
- Holding assigned office hours and marking assignments.
- Courses Assigned (Fall 2021): Elementary Computing, Computer Programming I, Data Structures and Algorithms, Topics in Wireless Communication.
- Courses Assigned (Winter 2022): Introduction to Assembly Language and Operating Systems, Big Data, Deep Learning.
- Courses Assigned (Fall 2023): Introduction to Computer Architecture, Cloud Computing.
- Courses Assigned (Winter 2023): Artificial Intelligence, Computer Networks and Distributed Systems.

Lakehead University | [Research Paper](#)

Thunder Bay, ON

Research Associate - Supervised by Professor Sabah Mohammed

September 2021 - August 2022

- Part of Mitacs research group that is focused on developing the next generation Graph-Based Problem Oriented Medical Record ("QL4POMR") in collaboration with the Thunder Bay Regional Health Sciences Center.
- Building Components of a large Medical Translation System that connects bedside clinical practices to bench side laboratory biomedical repositories for e-Consultation and Remote Patient Monitoring.
- Developing Micro-frontend collaborative Chatbots using MongoDB, Express JS, Angular JS, Node JS, React JS, GraphQL and AWS Amplify.
- Contributing to the publications of research papers and attending conferences.

PROJECTS

Sentiment Analysis Models | [Github Code](#) | (Python, Tensorflow, Keras, Scikit-Learn)

- Developed multi-label text classification NLP models to extract sentiments from ratemyprofessors.com comments.
- The multinomial Naive Bayes and SVM algorithm were providing the highest accuracy compared to the other models (Logistic Regression, Decision Tree, KNN, Random Forest) with and without text preprocessing.
- The performance of the models was compared to each other by using a bag of words model and a neural network-based model using pre-trained word embedding.
- The LIME framework was used to provide further insights into which features are responsible for a given output.

TalkEZ | **Speech To Text Mobile Android Application** (Python, Flask, Tensorflow, Keras, TFLite, Java, XML)

- Built a CNN speech detection model for users with severe speech and developmental disorders
- The model has an accuracy of 86% and successfully identifies keywords and displays the associated messages.
- The model "VoiceNet" is designed to operate with custom user-created vocabulary, and then is converted to TFLite and optimized for android mobile devices.