Meriem BEN CHAABEN
Computer Science Ph.D student

☎ +1 438 979 7260
📍 Montreal, Canada
@ meriem.ben.chaaben@umontreal.ca   in linkedin.com/in/meriem-ben-chaaben   ⚲ github.com/meriembenchaaben

🎓 EDUCATION

2023 - ongoing	**Ph.D student, Computer Science**, At the university of Montreal (UdeM).
2021 - 2023	**Computer Science Master student, AI Major with thesis option**, At the university of Montreal (UdeM).
2020 - 2021	**Information Processing and Complexity of the living Master student** , At the National Engineering School of Tunis, Tunisia (ENIT).
2018 - 2021	**Software Engineering Student**, At the National Institute of Applied Science and Technology, Tunisia.
2016 - 2018	**Preparatory cycle**, At INSAT, Mathematics, Physics and Computer Science.
2016	**High School Degree**, Math Major.

🎓 SCHOLARSHIPS

Fall 2022	**Excellence grant from the DIRO (Department of Computer Science and Operations Research) competition**, university of Montreal (UdeM).
Winter 2021	**International Students Scholarship**, As part of the program of the Ministry of Higher Education aiming at attracting international students to graduate programs in engineering and retaining them.
Winter 2021	**DIRO Excellence-Writing-Support scholarship competition**, university of Montreal (UdeM).
2021 - ongoing	**TUNISIAN National Scholarship for studies in Canada**

💼 WORK/INTERNSHIPS

January 2023 – April 2023

Graduate Teaching Assistant, UNIVERSITY OF MONTREAL, DIRO, (Winter 2023)
> Course : Software analysis and design.
> Undergraduate course (taught in French)
> Conducting lab sessions, assisting the professor, grading assignements and holding office hours

September 2022, 2023 – December 2022. 2023

Graduate Teaching Assistant, UNIVERSITY OF MONTREAL, DIRO, (Fall 2022, Fall 2023)

> Course : Software quality and metrics.
> Undergraduate course (taught in French)
> Grading assignements and holding office hours.

February 2021 – Juin 2021

Automating software Quality Benchmarking process , UNIVERSITY OF MICHIGAN-DEARBORN-ISE LAB, End of Studies Internship.
> Using clustering techniques to create customized benchmarks for software quality assessment. Using quality analysis to estimate the cost in terms of operations frequency to achieve a quantified benefit.
> Duty : Developing a module for Software Quality Benchmarking and quality target analysis.

`Python` `Java` `R` `Clustering` `NSGA-II`

July 2020 – September 2020

UNIVERSITY OF MICHIGAN-DEARBORN, ISE LAB, Research Internship
> Defining key concepts of containers smells and anti patterns.
> Collecting and cleaning Data of containers based projects.

`Docker` `Python` `Git/GitHub REST API` `BigQuery`

Jun 2019 – August 2019

MOBILE DEVELOPMENT INTERN, EXPENSYA, Tunisia, Internship
> Supporting the Expensya mobile application lifecycle.
> Duties : Contributed to developing new functionalities of expense management, Wrote unit tests to identify malfunctions.

`Xamarin` `App Center` `TFS`

✎ PUBLICATIONS

December 2022 | "Towards using Few-Shot Prompt Learning for Automating Model Completion", CONFERENCE PAPER,
- International Conference on Software Engineering (ICSE 2023) - New Ideas and Emerging Results (NIER) track
- Authors : **Meriem BenChaaben**, Loli Burgueno, Houari Sahraoui.

💼 PROJECTS

Mai 2022

Present

Designing and developing a design completion tool , UNIVERSITY OF MONTREAL, DIRO, Geodes Research group.
- Apply few prompt engineering principles as a novel approach to improve completion in domain modeling activities.
- Building an editor to assist designers in creating class diagrams.
- Conduct a user study to evaluate both efficiency and correctness of the editor.

September 2021

January 2022

Learning from Java code sources to suggest concepts for the completion of class diagrams, UNIVERSITY OF MONTREAL, DIRO, Geodes Research group.
- Implementing an iterative process of diagram construction where relevant concepts are suggested.
- Using MDRE pincipales to discover and mine Java code projects and extract data. Creating sub graphs data and tuning machine learning models. Evaluating the procedure.

`Python` `MoDisco` `GNN` `MDE concepts` `Reverse Enginnering`

January 2021
February 2021

Classifying Musical Instruments Sound, ENIT, Academic Project
- Applying Deep Learning techniques to the classification of instrumental sounds and focusing on hyper parameters analysis.

`Python` `Librosa` `Keras` `Tensorflow`

November 2020
December 2020

Tweets Mood Project, INSAT, Academic Project
- Designing and building a big data project that collects tweets in real time to analyze and predict social mood.

`Kafka` `Spark` `Pyspark`

February 2020

June 2020

Analyzing and Detecting Fake reviews of mobile apps - UNIVERSITY OF MICHIGAN-DEARBORN, INSAT, Final Year Project
- Developing a Multi-label classifier which aims to assign reviews to representative topics based on their content.
- Defining features to characterize reviews.
- Developing a classifier to automatically detect fake reviews in app stores.

`Keras` `Scikit-learn` `Python` `Google colab`

November 2019
January 2020

LINK - Web and Desktop Secured Application, INSAT, Academic Project
- Develop a web Platform to link sponsors and organizations
- Duties : Develop a Desktop app for a chatting Module, secured by using LDAP, RSA and DES encryption.

`LDAP` `OpenSSL` `PyQt5` `NodeJS` `ANGULAR` `Python`

January 2019
May 2019

Doctors' Platform, INSAT, Academic Project
- Develop a web Platform to organize the communication between doctors and patients and manage online appointments (Calendar synchronization)

`SCRUM` `ANGULAR` `Spring Boot` `JHipster` `MySQL`

☰ Skills/Certification

Programming Languages	Java Python C/C++ C# TypeScript JavaScript
Web Frameworks	Laravel Spring Boot .NET NodeJS ANGULAR
SGBD	ORACLE MySQL SQL Server
MDE concepts, tools and languages	EMF
Data Science	Keras Scikit-learn Tensorflow
DEEP LEARNING SPECIALIZATION	DEEPLEARNING.AI , COURSERA NLP CNN

</> Languages

English : Excellent, **TOEFL (iBT) score : 98/120**
French : Excellent
German : Beginner
Arabic : Very good

👥 Extracurricular Activities

October 2022	**Student volunteer** in MODELS conference 2022
September 2019	**Ai Hack Tunisia**
April 20, 2019	Infor Hackathon 4.0
2018 - 2019	**Vice President** , INSAT ANDROID Club
	Duties : Organizing different learning sessions and competitions.
2017 - 2018	**Treasurer and event sponsoring responsible**, IEEE CS Chapter INSAT
	Duties : Organizing workshops, teambuilding and events.
february 2017	Contestant -INSAT Collegiate programming contest -ICPC