# Omar ABEDELKADER

 ♥ Lille, France
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## About Me

I am an AI researcher with extensive experience in artificial intelligence and software engineering. I am currently pursuing a Ph.D. in Computer Science at the University of Lille.

## Education

University of Lille Villeneuve-d'Ascq, Nord

Oct. 2024 - Present

Ph.D in Computer Science

University of Lorraine Nancy, M&M

Sept. 2022 - Sept. 2024

M.Sc. in Natural Language Processing Lebanese University Beirut, Lebanon

Sept. 2019 - July 2022

B.Sc. in Data Science

# Experience

AI Researcher

Villeneuve d'Ascq, Nord Oct. 2024 - Oct. 2027

INRIA

• Improving code completion and generation using LLMs, specifically targeting the Pharo programming language, which has limited training data.

 Developing techniques for code completion, type inference, and deployment in Pharo's IDE, with a focus on runtime performance.

AI Engineer

Verneuil-en-Halatte, Oise

INERIS

Sept. 2023 - Sept. 2024

- Developing "INERIS-IA," a tool to classify textual documents based on INERIS's strategic goals using ML and NLP techniques
- Creating boolean queries for document retrieval, and improve corpus quality through document similarity and keyword extraction.

# Intern - AI Researcher

Villetaneuse, SSD

LIPN

June 2023 - Aug. 2023

- Comparison of various sampling techniques for probabilistic planning, particularly in generating literary narratives.
- Evaluate different methods, including the Score Function Estimator (SFE) and more advanced techniques like Gumbel-Softmax, to assess their effectiveness in creating coherent and creative stories.

# Awards and Honors

Best Paper Award (3rd place), IWST 2025, Gdańsk, Poland

"Package-Aware Approach for Repository-Level Code Completion in Pharo"

#### **Talks**

ChatPharo: An Open Architecture for Understanding How to Talk Live to LLMs, ESUG 2025

Presentation: Slides **Z** Video: Coming soon

## Mentorship

Google Summer of Code (GSoC), Mentor

Project Link

# Technologies & Skills

Programming Languages: Python, Pharo, Java, R, JavaScript, PHP, MySQL

Machine Learning & Deep Learning: TensorFlow, PyTorch, Keras, Scikit-learn

Natural Language Processing (NLP): SpaCy, NLTK

Big Data & Distributed Systems: Apache Spark, Hadoop

Data Analysis & Visualization: Pandas, Matplotlib, Seaborn

Scientific Computing: NumPy, SciPy

Web Development: Flask, Django, Laravel, ReactJS

Databases & Cloud: MongoDB, MySQL, AWS
Operating Systems: macOS, UNIX, Windows

Research Areas: Artificial Intelligence, Software Engineering

# Volunteering

NeuroTech-Lille: President

Ministère de la Transition Écologique: Contributor in Club IA et Transition écologique

Conseil National du Numérique (CNNum): Contributor in Café IA

Croix-Rouge Française: Volunteer First Aider

## **Hobbies**

Water Activities: Swimming · Diving

Outdoor and Adventure Sports: Hiking · Skiing · Skydiving

Creative and Artistic Activities: Photography
Precision Sports: Boxing · Bowling · Golf

# Language

French: Native English: B2



Scan Me!