

# NADIA BEN HADJ BOUBAKER

I am a first-year PhD student specializing in recommender systems and explainability. My research focuses on leveraging deep learning models and knowledge graphs to enhance recommendation performance and transparency. I have several publications in international conferences.

### CONTACT

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• | 46,route touristique chatt mariem, halk el menjel

#### SOCIAL ACTIVITIES

#### **AIESEC**

 Member: February 2020 – January 2022

 Data Manager: January 2022 – January 2023

#### **Tunivisions Club**

Human Resources Member:
 January 2021 – January 2022

## LANGUAGE

- French
- English
- German (B1 level)

## PROFESSIONAL EXPERIENCE

# LIRIS Laboratory, France

#### Research Intern

- February 2024 September 2024
  - Developed an explainable recommender system using deep learning models and knowledge graphs.

# **I&H Polymer Engineering**

#### Intern

- February 2022 June 2022
  - Design and implementation of a CRM system.

# **I&H Polymer Engineering**

#### Intern

- July 2022 September 2022
  - Development of a CRM system.

### PROFESSIONAL EDUCATION

## Salem Ben Hmida High School, Akouda

• Baccalaureate in Experimental Sciences

#### Higher Institute of Computer Science, Mahdia

• Bachelor's degree in Business Computing

## **Higher Institute of Management, Tunis**

 Research Master's degree in Intelligent Decision-Making Strategies

### Higher Institute of Management, Tunis

 First-year PhD student specializing in Recommender Systems and Explainability.

#### PROFESSIOANL SKILLS

- Programming & Data Analysis:
  Python, R, SQL, Java
- Machine Learning & Deep Learning: TensorFlow, PyTorch, Scikit-learn, Keras
- Data Visualization: Matplotlib,
  Plotly, Power BI, Tableau
- Big Data & Databases: Apache Spark, Hadoop, Neo4j, MySQL, MongoDB
- Natural Language Processing (NLP): Text mining, embeddings, transformers
- Graph Technologies: Knowledge Graph construction, RDF, SPARQL, NetworkX
- Version Control & Collaboration: Git, GitHub, GitLab

#### SOFT SKILLS

- Project management and teamwork
- Leadership and mentoring experience
- Strong communication and presentation skills
- Time management and multitasking
- Adaptability and continuous learning mindset

#### **PUBLICATIONS**

## Boubaker, N. B. H., Kodia, Z., & Ayadi, N. Y. (2024).

- Personalized E-Learning Knowledge Graph-based Recommender System using Ensemble Attention Networks.
- In Proceedings of the International Conference on Management of Digital Ecosystems (MEDES'2024), pp. 84– 100.

## Boubaker, N. B. H., Kodia, Z., & Ayadi, N. Y. (2025).

- Towards Solving the Cold Start and Explainability Challenges in Recommender Systems Using Knowledge Graphs and User Demographics Data.
- In Proceedings of the IEEE Conference on Control, Decision and Information Technologies (CoDIT'2025).

## Boubaker, N. B. H., Kodia, Z., & Ayadi, N. Y. (2025).

- A Hybrid Approach to Post-hoc Explanations in Recommender Systems: Embedding Meets Semantics.
- In Proceedings of the International Conference on Cooperative Information Systems (CoopIS'2025) – To Appear.