



Pole for Doctoral Studies
Center for Doctoral Studies
Sciences, Technologies, and Medical Sciences

ANNOUNCEMENT OF DOCTORAL THESIS DEFENSE



M. MOHAMMED AHMED MOQBEL SALE

**Will present here research work with the aim of earning a
Doctorate**

Doctoral program: Mathematics, Physics and New Technologies
Discipline: Computer Science
Specialty: Computer Science

**On 13/09/2025 at 10H00 at the meeting room of the Chemistry
Department of the Faculty of Sciences of Tetouan, UAE
Under the Theme**

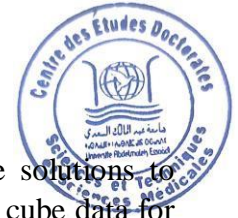
**An Intelligent Sustainable Strategic Forecasting Model in Supply
Chains: A Case Study on Ports Using Artificial Intelligence**

Front of the jury composed of :

| First Name & Last Name | Establishment | Designation |
|-----------------------------|----------------------|---------------|
| Pr. ABDOUN Otman | FS of Tetouan, UAE | President |
| Pr. EL AFIA Abdellatif | ENSIAS of Rabat, UM5 | Reviewer |
| Pr. EL MHOUTI Abderrahim | FS of Tetouan, UAE | Reviewer |
| Pr. TAOUIL Rafik | FS of Tetouan, UAE | Reviewer |
| Pr. YOUNES Ali | FS of Tetouan, UAE | Examiner |
| Pr. EL MEROUANI Mohamed | FS of Tetouan, UAE | Examiner |
| Pr. ATTARIUAS Hicham | ENCG of Tangier, UAE | Co-Supervisor |
| Pr. BEN MAATI Mohamed Larbi | FS of Tetouan, UAE | Supervisor |

Research Laboratory: Emerging Computer Technologies (ECT) UAE/SU13FS

Abstract



Ports play a crucial role in global supply chains, requiring innovative solutions to efficiently manage increased demand. The proposed approach integrates AI and cube data for real-time container routing and stacking decisions.

The first contribution introduces the Paired-Bay methodology, reducing crane movements and optimizing stacking with new storage rules, a 3D matrix model, and retrieval-based organization to minimize reorganization efforts.

The second contribution employs a data-centric AI approach, using deep learning (LSTM) and three-dimensional data to enhance decision-making and sustainability.

Through the papers we have published, we have achieved good results compared to previous articles, and we believe that it is necessary to integrate several AI algorithms and create a unified approach that includes simultaneously (dock, storage and door systems) to achieve better results in this area.

Key words: Container stacking, Artificial intelligence, Machine Learning, Supply Chain, 3D Matrix, Cube Data, LSTM, Deep Learning, AI algorithms, Real-time Decision, Storage space allocation.