

Associate Professor at the Faculty of Sciences – Ibn Tofail University

DEGREES

- 2018** **Habilitation** “*Quality of Service Management and Mobility Control in Ad Hoc Networks*”, ENSA Khouribga, Morocco
- 2011** **Ph.D.** in Computer Science and Telecommunications - Ibn Tofail University
- 2007** **Diploma of Advanced Studies (DESA)** - Ibn Tofail University
Topic: "*Implementation of Eduroam Infrastructure on MARWAN*" (CNRST) in Rabat (www.eduroam.org)
- 2004** **Diploma of Pedagogical Aptitude (DAP)** - École Normale Supérieure (ENS) in Rabat
- 2000** **Master's in Science and Technology (MST)** - My Ismail University, Faculty of Science and Technology of Errachidia

CERTIFICATIONS

- April 2016** **IBM Academic Certificate : Business Intelligence Specialist**
- March 2016** **IBM Academic Certificate : Big Data Specialist with IBM BigInsights**
- 2003** **Microsoft Certified Systems Engineer (MCSE)**- Microsoft Network Systems Engineer
- 2003** **Microsoft Certified Administrator (MCSA)**- Microsoft Network Administrator

Bachelor's Degree Program	<p>Semester 4: Operating System II Academic Years: 2022 - 2025 Topics:</p> <ul style="list-style-type: none"> • Processes • Scheduling • Signals • Pipes • Synchronization • Memory Management • File Management System (FMS) <p>Semester 5: Object-Oriented Programming in C++ Academic Year: 2020/2021 Topics:</p> <ul style="list-style-type: none"> • Introduction to C++ and C++ Review • C++ Specifications • Class and Object Concepts in C++ • Object Construction & Destruction • Inheritance • Polymorphism • Exceptions • Templates • Input/Output Streams – Files
Master	<p>Business Intelligence (Decision Support Systems) – Using Oracle - OBIEE Academic Years (MSBDCC): 2018-2024 Academic Year (MIA): 2023/2024 Topics:</p> <ul style="list-style-type: none"> • Introduction • Data Warehouses • Data Marts • Data Warehouse Architecture • Multidimensional Modeling <p>Business Analytics – Using IBM Cognos Academic Years (MSBDCC): 2020-2024 Topics:</p> <ul style="list-style-type: none"> • Business Analytics with IBM Cognos • Report Studio - IBM Cognos • Creating Focused Reports Using Prompts • Focused Reports Using Calculations • Advanced Report Building Techniques • Query Model Creation • Building Reports Based on Query Relationships • Creating Advanced Dynamic Reports
Computer Engineering at ENSA Khouribga	<p>Business Intelligence (Data Warehouse) Academic Years: 2014 - 2019 Topics:</p> <ul style="list-style-type: none"> • Introduction • Data Warehouses

- Data Marts
- Data Warehouse Architecture
- Multidimensional Modeling

System Programming on Unix

Academic Years: 2014 - 2019

Topics:

- Processes
- Signals
- Pipes
- Scheduling
- Threads
- Input & Output

System Administration on Unix

Academic Years: 2014 - 2019

Topics:

- Unix Structure
- Installation
- Files and Directories
- BOOT Process Management
- Access Rights Management
- User and Group Management
- Process Management
- Mounting, Compression, and Archiving
- Disk Management, Quota, and Packages
- Task Automation

Computing Tools (Maple)

Academic Years: 2016 - 2019

Topics:

- Introduction to Maple
- Sequences, Sets, Lists, Functions, and Graphical Representations
- Limits and Continuity
- Programming
- Taylor Expansions
- Parametric and Polar Curves
- Linear Algebra

Enterprise Resource Planning (ERP)

Academic Years: 2015 - 2019

Topics:

- Introduction
- History
- Definitions
- Advantages and Disadvantages
- Selection and Implementation
- Technical Architecture
- Market Offerings

PL/SQL Programming

Academic Years: 2014 - 2019

Topics:

	<ul style="list-style-type: none"> • Introduction to PL/SQL • Arrays and Structures • Exceptions • Procedures • Functions • Packages • Triggers <p>Database Administration with Oracle</p> <p>Academic Years: 2014 - 2019</p> <p>Topics:</p> <ul style="list-style-type: none"> • Oracle Architecture Components • Managing an Oracle Instance • Creating a Database • Data Dictionary and Dynamic Views • Control File Management • Password and Resource Security • User Management • Privilege Management • Role Management
CPGE- Maamoura Kenitra	<ul style="list-style-type: none"> ▪ Structures de données en C Année Universitaire : 2010-2014 Fonctions Allocation dynamique Structures Fichiers Listes Chainées Piles et Files ▪ Initiation à l'algorithmique en Python Année Universitaire : 2010-2014 Mise en place de python Expressions Structures de contrôle Structures de données Fonctions Entrées-sorties

Ph.D. Theses	<ul style="list-style-type: none"> • Topic: "Data Profiling for Predictive Analysis and Decision Support in Social Networks" Candidate: Bahaa Eddine Elbaghzaoui Defense Date: 30/12/2023 Role: Thesis Supervisor • Topic: "Contributions Based on Clustering Robustness in the Face of Node Mobility in MANETs" Candidate: Youness Hamzaoui Defense Date: 08/02/2020 Role: Co-supervisor • Topic: "Contributions to Improving Quality of Service in Mobile Ad Hoc Networks" Candidate: Moulay Hicham Hanin Defense Date: 20/05/2021 Role: Co-supervisor
Master's Supervision	<p>Master of Research in Artificial Intelligence</p> <ul style="list-style-type: none"> • Academic Year 2023/2024 <ul style="list-style-type: none"> ○ Mahalmadane Mahamane Toure: <i>Contextual Profiling and Error Correction in Natural Language Processing</i> ○ Fatima Ezzahraa Outahadate: <i>Integrating Artificial Intelligence in Library Services: Document Recommendation System and Autocompletion</i> <p>Master in Big Data and Cloud Computing</p> <ul style="list-style-type: none"> • Academic Year 2023/2024 <ul style="list-style-type: none"> ○ Othmane Bejja: <i>Precipitation Prediction in Morocco Using LSTM Architecture</i> • Academic Year 2022/2023 <ul style="list-style-type: none"> ○ Mohamed El Mokhtar Limam CHEikh: <i>Optimization of Record Linkage Approaches</i> ○ Youssef Karama: <i>Machine Learning for Anomaly Detection on Log Application Data</i> ○ Ennahoui Mohamed: <i>Schema Matching in a Data Integration System Based on Neural Networks</i> ○ Belatik Yousra: <i>Implementation of a Decision-Making Solution for Activity Monitoring in a Customer Service Center</i> • Academic Year 2021/2022 <ul style="list-style-type: none"> ○ Mohamed Amine Krit: <i>Crime Analysis and Prediction Using Machine Learning</i> ○ Bouroumana Ismail: <i>Deep Learning-Based Recommendation System</i> ○ Mohamed Ziyad Mansouri: <i>Voice Data Profiling and Machine Learning for Gender Identification and Prediction</i> ○ Marouane Dryouch: <i>Facial Recognition System</i> ○ Fatimazahrae Saber: <i>Optimization of Record Linkage in Big Data</i> • Academic Year 2020/2021 <ul style="list-style-type: none"> ○ Benradi Manar: <i>Trending: Prediction and Analysis of Tweet Trends - With and Without Content Consideration</i> ○ Tazi Nizar: <i>Life Event Detection</i>

	<ul style="list-style-type: none"> ○ Izem Manal: <i>Blockchain</i> ○ Es-sallamy Marouane: <i>Do the Public and Government Think Alike About the Moroccan Government's COVID-19 Actions?</i> ○ Ibnouratib Youssef: <i>Development of a System for Structuring Unstructured Activities</i> • Academic Year 2019/2020 <ul style="list-style-type: none"> ○ Abdou Mohamed Naira: <i>A Deep Learning Pipeline for Classifying Life Events: Application on Twitter</i> ○ Ali Bounou: <i>Event Detection on Twitter</i> ○ Amine Grimah: <i>Propagandist Detection on Twitter</i> ○ Mouad Benali: <i>Detection and Prediction via Similar Trajectory Measurements</i> ○ Raissa Missubah: <i>Do the Public and Government Think Alike About Actions Taken by the Moroccan Government to Combat COVID-19?</i> ○ Ouïam Ait Taleb: <i>Using Neural Networks to Identify Clickbaits in Online News</i> • Academic Year 2018/2019 <ul style="list-style-type: none"> ○ Abadi Fatima Zahra: <i>Development of a Decision Support System for a Higher Education Institution</i> ○ Achraham Soukaina: <i>Reporting Platform for "AL AKHDAR Bank"</i> ○ Moustafdil Fatima Zahra: <i>Reporting Platform for "AL AKHDAR Bank"</i> ○ Aloui Almostapha Abouennasr: <i>Using Business Intelligence and Data Science to Monitor, Understand, and Predict Turnover (Itelcia)</i> ○ Moujtahid Amine: <i>Electronic Document Management</i> ○ El Hilali Zineb: <i>Application of Predictive Models in the Insurance Field</i> ○ El Aabassi Meriem: <i>Implementation of a Decision-Making System for Maroc PME Information System and Development of a Website</i>
<p>Bachelor's Degree in Mathematical and Computer Sciences (SMI)</p>	<ul style="list-style-type: none"> • Academic Year 2023/2024 <ul style="list-style-type: none"> • Bak Jalal: <i>Development of a Web Application for Student Management</i> • Tajer Hiba: <i>Design and Development of an AI Chatbot for the Faculty of Sciences</i> • Hanne Ramata: <i>Design and Development of an AI Chatbot for the Faculty of Sciences</i> • Daim Imad: <i>Development of a Carpooling Web Application</i> • Ikarnade Reda: <i>Development of a Carpooling Web Application</i> • Britel Meriem: <i>Design and Development of a Hotel Reservation Website</i> • Fadol Meryem: <i>Design and Development of a Hotel Reservation Website</i> • Amrani Saad: <i>Design and Development of a Web Solution for Pharmacy Management</i> • Academic Year 2022/2023 <ul style="list-style-type: none"> • Dia Fatima Soulaka: <i>Development of a Web Application for Medical Record Management</i> • Traore Fatoumata: <i>Development of a Web Application for Medical Record Management</i> • Oumaima Bakhouché: <i>Development of a Web Application for Hotel Room Reservations</i> • Hajar El Kadiri: <i>Development of a Web Application for Hotel Room Reservations</i> • Niamat Sirrou: <i>Design and Development of a Web Application for Internship and PFE Management</i>

- Zakaria Tanto: *Design and Development of a Web Application for Internship and PFE Management*
- Marouane Boussata: *Design and Development of an Electronic Invoice Submission Application*

- **Academic Year 2021/2022**

- Rouimi Khaoula: *Design and Development of a Master Program Management Website*
- Hafid Lyna: *Design and Development of a Master Program Management Website*
- Chadi Salma: *Design and Development of a Web Application for Maintenance Ticket Management*
- El Hachimi Kaoutar: *Design and Development of a Web Application for Maintenance Ticket Management*
- Ntwali Clement: *Development of a Pharmacy Stock Management Application*
- Lekouvouka Ruth Waren: *Development of a Pharmacy Stock Management Application*
- Ehiri Mohamed: *Development of an Electronic Invoice Submission Application*
- Zaroual Hafssa: *Development of an Electronic Invoice Submission Application*

- **Academic Year 2020/2021**

- Achraf IDELHAJ: *Design and Development of a Dynamic E-Commerce Website*
- Youssef BAYA: *Design and Development of a Dynamic E-Commerce Website*
- Mohamed Abdo Tounsi: *Design and Development of a Project Management Website for Internships*
- Salma Er-Rouidi: *Design and Development of a Project Management Website for Internships*
- Zainab El Garti: *Design and Development of a Real Estate Sales Management System*
- Yasmine Idir: *Design and Development of a Real Estate Sales Management System*
- Manal Chailou: *Development of a Cyber Management and Engineering Conference Website*
- Roa Chair: *Development of a Cyber Management and Engineering Conference Website*

- **Academic Year 2019/2020**

- Charaf Eddine Outifaout: *Community Detection on Social Networks*
- Omar Ben Assou: *Community Detection on Social Networks*

- **Academic Year 2018/2019**

- Dalouch Ouafaa: *Evolution of LA POSTE's Online Postage Tool for E-Commerce Sites*
- Elbaghzaoui Bahaa Eddine: *Contribution to the Development of the Prospektor Platform*
- Elmorabit Youness: *Implementation and Customization of a PIM Solution Based on the SAP Hybris Platform*
- EL-Yaacoubi Achraf: *Web Application for Automatic Asset Management for Middle Eastern Clients*
- Jali Yousra: *Implementation of a Reporting Universe for the Finance Division of DAR AL AMANE*
- Naji Imane: *Implementation of a Web-Based Ticket Management Solution*

- **Academic Year 2017/2018**

- AZIZI Youssef: *Development of a KPI Cockpit for Managing SAP Team Activities*
- BOUHSISE Youness: *Integration of R/O Indicators in the Commercial Animation Info Center Application for Private Banking in France*
- CHAMANE Yacine: *Automation of Production Tracking for OSIRIS PME*
- DOUMARI Hamza: *Migration of an ERP (RIGILOG)*
- SAMSAM Ayoub: *Development of an Asterisk Call System AppExchange under SALESFORCE.COM*

<p>Thesis Defenses</p>	<ul style="list-style-type: none"> <p>• Topic: <i>Advancing AI-Driven Recommendation Systems through Semantics: From Knowledge-Enriched Data to Enhanced Recommendations</i> Candidate: Sajida Mhammedi Defense Date: 09/07/2024</p> <p>• Topic: <i>Artificial Intelligence for Traffic Management Framework in Smart Cities: A Predictive Modeling and Adaptive Light Control</i> Candidate: Idriss Moumen Defense Date: 06/07/2024</p> <p>• Topic: <i>Integration of Ontological Models into Machine Learning Algorithms for Predicting Fatal Diseases</i> Candidate: Hakim El Massari Defense Date: 14/06/2023</p> <p>• Topic: <i>Improving the Performance of Information Systems Using Lean: Toward a Lean Management System Adapted to Different Applications</i> Candidate: Soukayna Belkadi Defense Date: 10/05/2023</p> <p>• Topic: <i>Contribution to Wireless Sensor Networks and IoT Security: Challenges and Energy Cost Assessment</i> Candidate: Djene Yves Frederic Ebobisse Defense Date: 13/11/2023</p> <p>• Topic: <i>An Optimized Adaptive Learning Approach Integrating a Predictive and Proactive System Based on Learner Profiles in MOOCs</i> Candidate: Smaili El Miloud Defense Date: 01/12/2023</p> <p>• Topic: <i>Meta-Heuristic Approaches for Transportation Logistics Management in Home Healthcare</i> Candidate: Haitam Ettazi Defense Date: 19/07/2022</p> <p>• Topic: <i>Adaptive Traffic Light Management Using Metaheuristics</i> Candidate: Amal Merbah Defense Date: 24/06/2022</p> <p>• Topic: <i>Contribution to Content Recommendation in the Context of Big Data: Use Cases in Tourism and E-Learning</i> Candidate: Asmae Bentaleb Defense Date: 04/06/2022</p> <p>• Topic: <i>Mobility in Wireless Sensor Networks</i> Candidate: Saloua Outazgui Defense Date: 15/10/2022</p> <p>• Topic: <i>Modeling and Design of a 3D Serious Game: Contributions to Language Learning</i> Candidate: Yassine Tazouti Defense Date: 04/06/2021</p> <p>• Topic: <i>Artificial Intelligence for the Convergence of IoT and Cloud: Toward an Intelligent Approach for Mobile Data Security</i></p>
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Candidate: Ayoub Amrani
Defense Date: 16/01/2021

- **Topic:** *An MDA Approach for Integrating Security Policies into the Design and Generation of Secure Applications*

Candidate: Abdellatif Lasbahani
Defense Date: 20/12/2019

- **Topic:** *Toward Efficient Online Training Methods for Smartphone-Based Human Activity Recognition*

Candidate: Ilham Amezzane
Defense Date: 23/07/2019

- **Topic:** *Significant Impact of Planning Mobile Agent Itinerary in Network Management Systems*

Candidate: Ahmed Ali Alhanani Rafat
Defense Date: 26/06/2019

Conference Responsibilities	<ul style="list-style-type: none"> • 2024 <ul style="list-style-type: none"> • Session Chair of the Workshop "Multi-Agent AI & Game Theory," Faculty of Sciences, Kenitra, Morocco, January 8, 2024 • 2023 <ul style="list-style-type: none"> • Organizing Committee Member for the second edition of "The International Conference on Big Data and Artificial Intelligence Applications (ICBDIAA'23)," Laayoune, Morocco, November 3-4, 2023 • Organizing Committee Member for the first edition of "The International Workshop on Big Data and Artificial Intelligence Applications (IWBDIAA'23)," Kenitra, Morocco, May 11, 2023 • Session Chair of the Workshop for the first edition of "The International Workshop on Big Data and Artificial Intelligence Applications (IWBDIAA'23)," Kenitra, Morocco, May 11, 2023 • Organizing Committee Member for the conference "I2ST 2023: International Conference on Intelligent Systems and Smart Technologies," January 17-18, 2023, Settat, Morocco • 2022 <ul style="list-style-type: none"> • Plenary Session Chair for "The 3rd International Conference on Electronics, Control, Optimization, and Computer Science (ICECOCS'22)," December 1-2, 2022, Fes, Morocco (link) • Session Chair for "The 3rd International Conference on Electronics, Control, Optimization, and Computer Science (ICECOCS'22)," December 1-2, 2022, Fes, Morocco (link) • Organizing Committee Member for "The 4th Edition of Research Initiation Days for Future Ph.D. Students in Computer Science (JIRDIK'22)," June 21-22, 2022, Kenitra, Morocco • Organizing Committee Member for "The Second Edition of the International Workshop on Computing Sciences (WCOS'22)," June 20, 2022, Kenitra, Morocco (link) • Session Chair for "The Second Edition of the International Workshop on Computing Sciences (WCOS'22)," June 20, 2022, Kenitra, Morocco (link) • 2021 <ul style="list-style-type: none"> • Organizing Committee Member for "The International Conference on Information, Communication & Cybersecurity (ICI2C)," November 11-12, 2021, ENSA Khouribga, Morocco (link) • Organizing Committee Member for "The 2nd Edition of Research Initiation Days for Future Ph.D. Students in Computer Science (JIRDIK'21)," June 21-22, 2021, Kenitra, Morocco • 2020 <ul style="list-style-type: none"> • Organizing Committee Member for "The 1st Edition of Research Initiation Days for Future Ph.D. Students in Computer Science
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(JIRDIK'20)," January 28, 2020, Kenitra, Morocco

- **2019**

- Scientific Committee Member for "The International Conference of Computing for Engineering and Sciences (ICCES'19)," July 3-4, 2019, Kenitra, Morocco
- Organizing Committee Member for "The International Conference of Computing for Engineering and Sciences (ICCES'19)," July 3-4, 2019, Kenitra, Morocco
- Program Committee Member for "The International Conference of Computing for Engineering and Sciences (ICCES'19)," July 3-4, 2019, Kenitra, Morocco
- Keynote Speaker at "The International Conference of Computing for Engineering and Sciences (ICCES'19)," July 3-4, 2019, Kenitra, Morocco

- **2017**

- Organizing Committee Member for the "International Conference on Information Technology and Communication Systems (ITCS'17)," March 28-29, 2017, ENSA Khouribga, Morocco
- Session Chair for the "International Conference on Information Technology and Communication Systems (ITCS'17)," March 28-29, 2017, ENSA Khouribga, Morocco
- Scientific Committee Member for the "International Conference on Information Technology and Communication Systems (ITCS'17)," March 28-29, 2017, ENSA Khouribga, Morocco
- Organizing Committee Member for the "6th Edition of Open Source Days: Open Innovation – A Collective Contribution to the Design of Frugal Solutions," March 7-8, 2017, ENSA Khouribga, Morocco

Administrative Responsibilities	<ul style="list-style-type: none"> • Recruitment Committee Roles <ul style="list-style-type: none"> • Member of the recruitment jury for a <i>Senior Lecturer in Computer Science</i>, Faculty of Economics and Management, Kenitra, session on October 30, 2023 • President of the recruitment jury for an <i>Assistant Professor in Computer Science</i>, National School of Commerce and Management of Kenitra, session on August 8, 2023 • Member of the recruitment jury for an <i>Assistant Professor in Computer Science</i>, National School of Applied Sciences of Berrechid, sessions on July 15, 2021, August 10, 2020, July 1, 2019, and March 1, 2019 • Member of the recruitment jury for a <i>3rd Grade Technician in Computer Science and Networks</i>, National School of Applied Sciences of Khouribga, session on October 30, 2016 • Member of the recruitment jury for a <i>Computer Science Engineer</i>, National School of Applied Sciences of Khouribga, session on December 27, 2015 • Program Coordination <ul style="list-style-type: none"> • Coordinator of the Computer Engineering program, National School of Applied Sciences (ENSA) of Khouribga, 2017-2019 • Scientific Committee <ul style="list-style-type: none"> • Member of the Scientific Committee of the National School of Applied Sciences (ENSA) of Khouribga • Supervision and Organization of Entrance Exams <ul style="list-style-type: none"> • Supervised and organized the entrance exam for the 2nd year of the engineering cycle in Computer Engineering for the academic year 2018/2019 at ENSA Khouribga
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- **University Habilitation**

- *Mohamed Amnai: Quality of Service Management and Mobility Control in Ad Hoc Networks*, University Habilitation, ENSA Khouribga, Morocco, March 11, 2018 (or October 2, 2017 or September 29, 2017)

- **Ph.D. Thesis**

- *Mohamed Amnai: Quality of Service Management and Mobility Control in Ad Hoc Networks*, Ph.D. Thesis, Faculty of Sciences, Ibn Tofail University, Kenitra, Morocco, December 6, 2011

- **Book**

- *Quality of Service Management and Mobility Control in Ad Hoc Networks*
 - ISBN-10: 978-3-8465-2202-8 ([LAP LAMBERT Academic Publishing](https://www.lap-publishing.com/)), May 1, 2012

Articles

- [1]. Elbaghazaoui, B.E., Amnai, M., Fakhri, Y., Choukri, A., Gherabi, N.
Precision Profiling of Fake News in Social Media Using Advanced Machine Learning
 IAES International Journal of Artificial Intelligence (IJ-AI) (SJIR, 0.37, 2023),
 (2024)
- [2]. Algorithms Moudden, T.E., Amnai, M., Choukri, A., Fakhri, Y., Noredine, G.
Artificial intelligence for assessing the planets' positions as a precursor to earthquake events
Journal of Geodynamics (SJIR, 0.75, 2023),
 (2024) 162, art. no. 102057, . DOI: 10.1016/j.jog.2024.102057, , ISSN: 02643707
Document Type: Article **Source:** Scopus
- [3]. Hebabaze, S.E., El Ghmary, M., El Bouabidi, H., Maftah, S., Amnai, M.
From Micro-benchmarks to Machine Learning: Unveiling the Efficiency and Scalability of Hadoop and Spark
International Journal of Interactive Mobile Technologies (SJIR 0.4, 2023),
 (2024) 18 (17), pp. 46-60. DOI: 10.3991/ijim.v18i17.44555, , ISSN: 18657923
Document Type: Article **Source:** Scopus
- [4]. Moudden, T.E., Amnai, M., Choukri, A., Fakhri, Y., Noredine, G.
New unfreezing strategy of transfer learning in satellite imagery for mapping the diversity of slum areas: A casestudy in Kenitra city—Morocco
Scientific African (SJIR 0.58, 2023)
 (2024) 24, art. no. e02135, . DOI: 10.1016/j.sciaf.2024.e02135, , ISSN: 24682276
Document Type: Article **Source:** Scopus
- [5]. Maftah, S., El Ghmary, M., El Bouabidi, H., Amnai, M., Ouacha, A.
Intelligent task processing using mobile edge computing: processing time optimization
IAES International Journal of Artificial Intelligence
 (2024) 13 (1), pp. 143-152. DOI: 10.11591/ijai.v13.i1.pp143-152, , ISSN: 20894872
Document Type: Article **Source:** Scopus

- [6]. Mhammedi, S., Gherabi, N., El Massari, H., Sabouri, Z., Amnai, M.
A highly scalable CF recommendation system using ontology and SVD-based incremental approach
Bulletin of Electrical Engineering and Informatics
 (2023) 12 (6), pp. 3768-3779. DOI: 10.11591/eei.v12i6.6261, , ISSN: 20893191
Document Type: Article **Source:** Scopus
- [7]. Elbaghazaoui, B.E., Amnai, M., Fakhri, Y.
Predicting user behavior using data profiling and hidden Markov model
International Journal of Electrical and Computer Engineering
 (2023) 13 (5), pp. 5444-5453. DOI: 10.11591/ijece.v13i5.pp5444-5453, , ISSN: 20888708
Document Type: Article **Source:** Scopus
- [8]. Moudden, T.E., Amnai, M.
Building an efficient convolution neural network from scratch: A case study on detecting and localizing slums
Scientific African (SJR 0.58, 2023)
 (2023) 20, art. no. e01612, . DOI: 10.1016/j.sciaf.2023.e01612, , ISSN: 24682276
Document Type: Article **Source:** Scopus
- [9]. Elbaghazaoui, B.E., Amnai, M., Fakhri, Y.
Predicting the next word using the Markov chain model according to profiling personality
Journal of Supercomputing (SJR 0.76, 2023),
 (2023) 79 (11), pp. 12126-12141. DOI: 10.1007/s11227-023-05125-2, , ISSN: 09208542, CODEN: JOSUE
Document Type: Article **Source:** Scopus
- [10]. El Moudden, T., Dahmani, R., Amnai, M., Fora, A.A.
Slum image detection and localization using transfer learning: a case study in Northern Morocco
International Journal of Electrical and Computer Engineering (SJR 0.32, 2023)
 (2023) 13 (3), pp. 3299-3310. DOI: 10.11591/ijece.v13i3.pp3299-3310, ISSN: 20888708
Document Type: Article **Source:** Scopus
- [11]. Abassi, M.E., Amnai, M., Choukri, A., Fakhri, Y., Gherabi, N.
Matching data detection for the integration system
International Journal of Electrical and Computer Engineering (SJR 0.32, 2023),
 (2023) 13 (1), pp. 1008-1014. DOI: 10.11591/ijece.v13i1.pp1008-1014, ISSN: 20888708
Document Type: Article **Source:** Scopus
- [12]. Mhammedi, S., Gherabi, N., El Massari, H., Amnai, M.
Enhancing Recommendation System using Ontology-based Similarity and Incremental SVD Prediction
Recent Advances in Computer Science and Communications (SJR 0.2, 2023),
 (2023) 16 (9), art. no. e230823220260, pp. 67-76. DOI: 10.2174/2666255816666230823125227, ISSN: 26662558
Document Type: Article **Source:** Scopus
- [13]. Sabouri, Z., Gherabi, N., Nasri, M., Amnai, M., El Massari, H., Moustati, I.
Prediction of Depression via Supervised Learning Models: Performance Comparison and Analysis
international journal of online and biomedical engineering (SJR, 0.39, 2023)
 (2023) 19 (9), pp. 93-107. DOI: 10.3991/ijoe.v19i09.39823, ISSN: 26268493
Document Type: Article **Source:** Scopus
- [14]. El Bouabidi, H., EL Ghmary, M., Maftah, S., Amnai, M., Ouacha, A.
Applying Logarithm and Russian Multiplication Protocols to Improve Paillier's Cryptosystem

International Journal of Advanced Computer Science and Applications (SJR 0.28, 2023),
(2022) 13 (11), pp. 792-797. **DOI:** 10.14569/IJACSA.2022.0131192, **ISSN:** 2158107X
Document Type: Article **Source:** Scopus

[15]. Maftah, S., El Ghmary, M., El Bouabidi, H., Amnai, M., Ouacha, A.
Optimal Task Processing and Energy Consumption Using Intelligent Offloading in Mobile Edge Computing
International Journal of Interactive Mobile Technologies (SJR 0.4, 2023),
(2022) 16 (20), pp. 130-142. **DOI:** 10.3991/ijim.v16i20.34373, **ISSN:** 18657923
Document Type: Article **Source:** Scopus

[16]. Elbaghazaoui, B.E., Amnai, M., Fakhri, Y.
Data Profiling and Machine Learning to Identify Influencers from Social Media Platforms
Journal of ICT Standardization (SJR 0.37, 2023),
(2022) 10 (2), pp. 201-218. **DOI:** 10.13052/jicts2245-800X.1026, **ISSN:** 2245800X
Document Type: Article **Source:** Scopus

[17]. Hanin, M.H., Amnai, M., Fakhri, Y.
New adaptation method based on cross layer and TCP over protocols to improve QoS in mobile ad hoc network
International Journal of Electrical and Computer Engineering (SJR 0.32, 2023),
(2021) 11 (3), pp. 2134-2142. **DOI:** 10.11591/ijece.v11i3.pp2134-2142, **ISSN:** 20888708
Document Type: Article **Source:** Scopus

[18]. Hamzaoui, Y., Amnai, M., Choukri, A., Fakhri, Y.
Enhancenig OLSR routing protocol using K-means clustering in MANETs
International Journal of Electrical and Computer Engineering (SJR 0.32, 2023),
(2020) 10 (4), pp. 3715-3724. **DOI:** 10.11591/ijece.v10i4.pp3715-3724, **ISSN:** 20888708
Document Type: Article **Source:** Scopus

[19]. Choukri, A., Hamzaoui, Y., Amnai, M., Fakhri, Y.
Classification algorithm based on nodes similarity for MANETs
international journal of online and biomedical engineering (SJR 0,39, 2023)
(2019) 15 (5), pp. 86-100. **DOI:** 10.3991/ijoe.v15i05.9742, **ISSN:** 26268493
Document Type: Article **Source:** Scopus

[20]. Hamzaoui, Y., Amnai, M., Choukri, A., Fakhri, Y.
Enhancing OLSR routing protocol using K-medoids clustering method in MANETs
International Journal of Applied Engineering Research (SJR 0, 2023)
(2017) 12 (2), pp. 200-206. , **ISSN:** 09734562
Document Type: Article **Source:** Scopus

[21]. Hicham, H.M., Mohamed, A., Youssef, F.
Enhanced multi-point relay selection based on fuzzy logic
International Review on Computers and Software (SJR 0, 2023)
(2016) 11 (6), pp. 466-472. **DOI:** 10.15866/irecos.v11i6.9064, **ISSN:** 18286003
Document Type: Article **Source:** Scopus

[22]. Amnai, M., Fakhri, Y., Abouchabaka, J.
Adaptive fuzzy mobility for delay and throughput sensitive traffic in Ad Hoc networks
International Review on Computers and Software (SJR 0, 2023)
(2012) 7 (3), pp. 965-971. , **ISSN:** 18286003
Document Type: Article **Source:** Scopus

[23]. Choukri, A., Amnai, M., Habbani, A., Elkoutbi, M.
AODV protocol behavior based on H.264 multiservice traffic
International Review on Computers and Software (SJR 0, 2023)

(2012) 7 (5), pp. 2121-2125. , **ISSN:** 18286003

Document Type: Article **Source:** Scopus

[24]. Fakhri, Y., Amnai, M., Abouchabaka, J.

Traffic multiservice based performance analysis of OLSR and AODV protocols for mobile ad hoc networks

International Journal of Advancements in Computing Technology (SJRT), 2023)

(2011) 3 (8), pp. 304-313. **DOI:** 10.4156/ijact.vol3.issue8.36, **ISSN:** 20058039

Document Type: Article **Source:** Scopus

Chapitres

[1]. Elbaghazaoui, B.E., Amnai, M., Fakhri, Y.
Influencer Profiling to Identify the Top Keywords Using LDA
Lecture Notes on Data Engineering and Communications Technologies
(2023) 141, pp. 377-388. DOI: 10.1007/978-981-19-3035-5_29, ISSN: 23674512
Document Type: Book Chapter Source: Scopus

[2]. Elbaghazaoui, B.E., Amnai, M., Fakhri, Y.
User Profiling and Influence Maximization
Lecture Notes on Data Engineering and Communications Technologies
(2022) 126, pp. 221-232. DOI: 10.1007/978-981-19-2069-1_16, ISSN: 23674512
Document Type: Book Chapter Source: Scopus

Conférences

[1]. Zahrae, S.F., Ali, C., Mohamed, A.
Record Linkage Approaches in Big Data: A Comprehensive Review
International Conference on Intelligent Systems and Computer Vision, ISCV 2024
(2024). DOI: 10.1109/ISCV60512.2024.10620076, , ISBN: 9798350350180
Document Type: Conference Paper Source: Scopus

[2]. Elbaghazaoui, B.E., Amnai, M., Fakhri, Y., Choukri, A., Gherabi, N.
Event Profiling in Social Media: A Survey with an Application
4th International Conference on Innovative Research in Applied Science, Engineering and Technology, IRASET2024
(2024) . DOI: 10.1109/IRASET60544.2024.10548943, , ISBN: 9798350309508
Document Type: Conference Paper Source: Scopus

[3]. Mhammedi, S., El Massari, H., Gherabi, N., Amnai, M.
Enhancing Book Recommendations on GoodReads: A Data Mining Approach Based Random Forest Classification
Lecture Notes in Networks and Systems
(2024) 938 LNNS, pp. 395-409. DOI: 10.1007/978-3-031-54376-0_36, , ISSN: 23673370, , ISBN: 9783031543753
Document Type: Conference Paper Source: Scopus

[4]. Ridani, M., Amnai, M.
Query Optimization Using Indexation Techniques in Datawarehouse: Survey and Use Cases
Lecture Notes in Networks and Systems
(2024) 837 LNNS, pp. 406-412. DOI: 10.1007/978-3-031-48465-0_53, , ISSN: 23673370, , ISBN: 9783031484643
Document Type: Conference Paper Source: Scopus

[5]. Maftah, S., Ghmary, M.E., Amnai, M.
Virtual Machine Selection in Mobile Edge Computing: Computing Re Sources Efficiency
Lecture Notes in Networks and Systems
(2024) 837 LNNS, pp. 413-419. DOI: 10.1007/978-3-031-48465-0_54, , ISSN: 23673370, , ISBN: 9783031484643
Document Type: Conference Paper Source: Scopus

[6]. Imane, B., Mohamed, A.
Grape and Apple Plant Diseases Detection Using Enhance DenseNet121 Based Convolutional Neural Network
Lecture Notes in Networks and Systems

(2024) 826, pp. 213-226. **DOI:** 10.1007/978-3-031-47672-3_22, , **ISSN:** 23673370, , **ISBN:** 9783031476716

Document Type: Conference Paper **Source:** Scopus

[7]. Sabouri, Z., Gherabi, N., Amnai, M.

Comparative Study of Supervised Regression Algorithms in Machine Learning

Lecture Notes in Networks and Systems

(2024) 826, pp. 365-373. **DOI:** 10.1007/978-3-031-47672-3_35, , **ISSN:** 23673370, , **ISBN:** 9783031476716

Document Type: Conference Paper **Source:** Scopus

[8]. Tahiri, S., Choukhairi, M., Fakhri, Y., Amnai, M.

Enhancing QoS in IoT through Big Data-Driven Networking and Computing Technologies

EEE International Conference on Technology Management, Operations and Decisions, ICTMOD 2023

(2023) . **DOI:** 10.1109/ICTMOD59086.2023.10438165, , **ISBN:** 9798350313352

Document Type: Conference Paper **Source:** Scopus

[9]. Hamzaoui, Y., Chekour, M., Amnai, M.

Enhanced MPR Selection Algorithm Based on Metrics for the OLSR Routing Protocol

Proceedings - 6th International Conference on Advanced Communication Technologies and Networking, CommNet2023

(2023) . **DOI:** 10.1109/CommNet60167.2023.10365281, , **ISBN:** 9798350329391

Document Type: Conference Paper **Source:** Scopus

[10]. Briouya, A., Briouya, H., Choukri, A., Amnai, M., Fakhri, Y.

Exploration of Question-Answering Systems: Survey

Proceedings - 10th International Conference on Wireless Networks and Mobile Communications, WINCOM 2023,

(2023) . **DOI:** 10.1109/WINCOM59760.2023.10322930, , **ISBN:** 9798350329674

Document Type: Conference Paper **Source:** Scopus

[11]. Choukhairi, M., M'Haouach, M., Fakhri, Y., Amnai, M.

Tree-Driven Intelligent Security System for Intrusion Detection in IoT environment

Proceedings - 10th International Conference on Wireless Networks and Mobile Communications, WINCOM 2023,

(2023) . **DOI:** 10.1109/WINCOM59760.2023.10322954, , **ISBN:** 9798350329674

Document Type: Conference Paper **Source:** Scopus

[12]. Ridani, M., Amnai, M., Choukri, A., Fakhri, Y., Gherabi, N.

Indexation techniques in decision support systems: Study and Evaluation

Proceedings - 10th International Conference on Wireless Networks and Mobile Communications, WINCOM 2023,

(2023) . **DOI:** 10.1109/WINCOM59760.2023.10322993, , **ISBN:** 9798350329674

Document Type: Conference Paper **Source:** Scopus

[13]. Ayoub, O., Youssef, F., Boulaknadel, S., Mohamed, A.

Automatic classification of emails using Deep Learning

Proceedings - 10th International Conference on Wireless Networks and Mobile Communications, WINCOM 2023,

(2023) . **DOI:** 10.1109/WINCOM59760.2023.10322909, **ISBN:** 9798350329674

Document Type: Conference Paper **Source:** Scopus

[14]. Elbaghazaoui, B.E., Amnai, M., Fakhri, Y., Choukri, A., Gherabi, N.

Profiling Language Sign Using Deep Learning

Proceedings - 10th International Conference on Wireless Networks and Mobile Communications, WINCOM 2023,

(2023) . DOI: 10.1109/WINCOM59760.2023.10323023, ISBN: 9798350329674
Document Type: Conference Paper **Source:** Scopus

[15]. Maftah, S., EL Ghmary, M., El Bouabidi, H., Amnai, M., Ouacha, A.
Optimal Resource Allocation in Mobile Edge Computing Based on Virtual Machine Migration
Lecture Notes in Networks and Systems,
(2023) 625 LNNS, pp. 575-585. DOI: 10.1007/978-3-031-28387-1_48, ISSN: 23673370, ISBN: 9783031283864
Document Type: Conference Paper **Source:** Scopus

[16]. El Bouabidi, H., El Ghmary, M., Maftah, S., Amnai, M., Ouacha, A.
Using MPI to Compare Two Protocols That Allow Paillier's Cryptosystem to Perform Homomorphic Multiplication
Lecture Notes in Networks and Systems,
(2023) 635 LNNS, pp. 812-817. DOI: 10.1007/978-3-031-26254-8_118, ISSN: 23673370, ISBN: 9783031262531
Document Type: Conference Paper **Source:** Scopus

[17]. Mhammedi, S., El Massari, H., Gherabi, N., Amnai, M.
CF Recommender System Based on Ontology and Nonnegative Matrix Factorization (NMF)
Lecture Notes in Networks and Systems,
(2023) 635 LNNS, pp. 313-318. DOI: 10.1007/978-3-031-26254-8_44, ISSN: 23673370, ISBN: 9783031262531
Document Type: Conference Paper **Source:** Scopus

[18]. Sabouri, Z., Gherabi, N., El Massari, H., Mhammedi, S., Amnai, M.
A SWOT Analysis for Healthcare Using Machine Learning
Lecture Notes in Networks and Systems,
(2023) 635 LNNS, pp. 126-131. DOI: 10.1007/978-3-031-26254-8_19, ISSN: 23673370, ISBN: 9783031262531
Document Type: Conference Paper **Source:** Scopus

[19]. Ridani, M., Amnai, M.
Optimization challenge in decision supporting systems: An overview
IEEE 3rd International Conference on Electronics, Control, Optimization and Computer Science, ICECOCS2022
(2022) . DOI: 10.1109/ICECOCS55148.2022.9982911, ISBN: 9781665457231
Document Type: Conference Paper **Source:** Scopus

[20]. Elbaghazaoui, B.E., Amnai, M., Fakhri, Y., Choukri, A., Gherabi, N.
Human profiling based on computer vision : A survey with application
IEEE 3rd International Conference on Electronics, Control, Optimization and Computer Science, ICECOCS2022
(2022) . DOI: 10.1109/ICECOCS55148.2022.9983332, ISBN: 9781665457231
Document Type: Conference Paper **Source:** Scopus

[21]. Izem, M., Amnai, M.
Blockchain technology: A bibliographic study
IEEE 3rd International Conference on Electronics, Control, Optimization and Computer Science, ICECOCS2022
(2022) . DOI: 10.1109/ICECOCS55148.2022.9983286, ISBN: 9781665457231
Document Type: Conference Paper **Source:** Scopus

[22]. Merieme, E.A., Mohamed, A., Ali, C., Fakhri, Y., Noredine, G.
A survey on the challenges of data integration

Proceedings - 2022 9th International Conference on Wireless Networks and Mobile Communications, WINCOM2022

(2022) . DOI: 10.1109/WINCOM55661.2022.9966419, ISBN: 9781665452762

Document Type: Conference Paper **Source:** Scopus

[23]. Choukhairi, M., Fakhri, Y., Amnai, M.

TTIDS : A Time-Driven Trust Based Intrusion Detection System for IoT Networks

Proceedings - 2022 9th International Conference on Wireless Networks and Mobile Communications, WINCOM2022

(2022) . DOI: 10.1109/WINCOM55661.2022.9966466, ISBN: 9781665452762

Document Type: Conference Paper **Source:** Scopus

[24]. Mouad, B., Mohamed, A.

Detection and Prediction Using Similar Trajectory Measurements

Lecture Notes in Networks and Systems

(2022) 357 LNNS, pp. 155-163. DOI: 10.1007/978-3-030-91738-8_15, ISSN: 23673370, ISBN: 9783030917371

Document Type: Conference Paper **Source:** Scopus

[25]. Elbaghazaoui, B.E., Amnai, M., Fakhri, Y.

Optimized Influencers Profiling from Social Media Based on Machine Learning

Lecture Notes in Networks and Systems

(2022) 357 LNNS, pp. 43-56. DOI: 10.1007/978-3-030-91738-8_5, ISSN: 23673370, ISBN: 9783030917371

Document Type: Conference Paper **Source:** Scopus

[26]. Hanin, M.H., Fakhri, Y., Amnai, M.

A new efficient technique to enhance quality of service in OLSR protocol

advances in intelligent systems and computing (SJR o, 2023)

(2019) 915, pp. 85-97. DOI: 10.1007/978-3-030-11928-7_7, ISSN: 21945357, ISBN: 9783030119270

Document Type: Conference Paper **Source:** Scopus

[27]. Amnai, M., Fakhri, Y., Abouchabaka, J.

Evaluation of impact of traffic VBR and mobility on the performance of AODV routing protocols in mobile ad hoc networks

International Conference on Multimedia Computing and Systems -Proceedings

(2011) art. no. 5945720, . DOI: 10.1109/ICMCS.2011.5945720, ISBN: 9781612847306

Document Type: Conference Paper **Source:** Scopus

[28]. Amnai, M., Fakhri, Y., Abouchabaka, J.

Throughput-delay optimisation with adaptive method in wireless ad hoc network

5th International Symposium on I/V Communications and Mobile Networks, ISIVC 2010

(2010) art. no. 5656287, DOI: 10.1109/ISVC.2010.5656287, ISBN: 9781424459988

Document Type: Conference Paper **Source:** Scopus