

# CURRICULUM VITAE



## Nacereddine Hammami (Algerian)

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**PROFILE OVERVIEW:** Ph.D. in Computer Engineering (Artificial Intelligence) with over 10 years of academic and research experience. Currently serving as a faculty member at Fahad Bin Sultan University, contributing extensively to program development, curriculum innovation, and alignment with international accreditation standards, including ongoing work toward British accreditation frameworks (e.g., BCS). Previously served as Head of the Computer Engineering Department at Mustaqbal University, where I led strategic initiatives that resulted in the successful launch of new specialization tracks in Artificial Intelligence and Robotics. My research interests encompass Artificial Intelligence, Computer Engineering, Human Factors, and Safety and Security, with a strong record of multidisciplinary collaboration across Europe, Africa, and the Middle East.

## TITLES & DIPLOMAS

- **2014**                    **PhD in Computer Engineering, Option: *Artificial Intelligence***  
Badji Mokhtar -Annaba University – Algeria, pre-thesis in Grenoble University – France with Distinction (very honourable).
- **2010**                    **Master in Computer Engineering, Option: *Artificial Intelligence***  
Badji Mokhtar -Annaba University – Algeria.
- **2005**                    **Master in Computer Science,**  
François Rabelais University, Tours – France.
- **2004**                    **Bachelor –Engineer-Computer Engineering, Option: *Artificial Intelligence***  
University of Jijel - Algeria.

## EXPERIENCES

- **Since Sep 2025**            **Assistant Professor, Computer Engineering Dept, Fahad Bin Sultan University, Saudi Arabia.**
- **2024-2025**                **Head of Computer Engineering Dept, Mustaqbal University, Saudi Arabia.**
- **2020-2023**                **Assistant Professor, Computer Engineering Dept, Mustaqbal University, Saudi Arabia.**
- **2015-2019**                **Assistant Professor, Engineer faculty, Annaba University, Algeria (Part Time)**

## QUALITY ASSURANCE AND ACADEMIC DEVELOPMENT EXPERIENCE

- Since September 2025, actively involved in aligning academic programs with British international accreditation frameworks (e.g., BCS), contributing to standards mapping, outcome alignment, and quality enhancement initiatives.
- Head of the Computer Engineering Department at Mustaqbal University, overseeing quality assurance and program development across three specialization tracks and two standalone academic programs.

- Supervised the development and continuous improvement of the Computer Engineering Program in alignment with national qualification frameworks and accreditation standards.
- Led the successful launch of new academic programs and tracks, including the Artificial Intelligence Program and the Robotics Track.
- Managed accreditation processes, including comprehensive self-study report preparation, documentation review, and continuous improvement planning.
- Served as Quality Advisor at the Deanship of Admission and Registration, and as a committee member and rapporteur for program self-evaluation and institutional quality reviews.
- Completed specialized training through workshops and professional development courses in self-evaluation, accreditation report writing, outcome-based program design, and electronic quality management systems.
- Professional experience at a Computer Science and Telecommunications Services Company, Grenoble, France.

## ***ACADEMIC TEACHING EXPERIENCE***

- Extensive teaching experience across multiple higher education institutions, delivering specialized courses in Artificial Intelligence, Computer Engineering, and Computer Science at both undergraduate and postgraduate levels.
- Experienced in outcome-based education, curriculum development, and supervision of senior and research projects, with the ability to adapt to diverse academic and accreditation frameworks.
- A detailed list of courses taught can be provided upon request.

## ***ADVANCED TRAINING EXPERIENCE***

- **Since 2019** Co-Supervisor of PhD theses in Artificial Intelligence and Pattern recognition field. Department of Computer Engineering, Annaba University, Algeria.
- **03/2005-07/2005** Training course in Master 2 Research Computer Science ,“Probabilistic models Indexed by aleatory trees for imagery – Detection of human skin”,  
***CNRS-France (National Center of Scientific Research) project***  
***MathStic project (2004-2005) supported by CNRS-France***  
***(with Bruno Jedynek and Laurent Younes)***  
[http://www.enic.fr/people/daoudi/MathStic/projet\\_math\\_stic.html](http://www.enic.fr/people/daoudi/MathStic/projet_math_stic.html)
- **01/2004-06/2004** Project EoS : “Study and realization of an algorithm of data compression on a parallel Architecture”, Laboratory of computer science of Awlade Issa, Jijel-Algeria.

## PROGRAM LANGUAGES & OPERATING SYSTEMS

- Strong proficiency in multiple programming languages, including **Java**, **C/C++**, **SQL**, **Delphi**, and **Assembly** (Z80, 680x0, 80x86)...etc.
- Specialized experience in:
  - Programming for image processing applications
  - Parallel and distributed programming (e.g., RMI in Java)
  - Network programming, data mining, and data analysis
  - Statistical and scientific programming using **R**, **S-PLUS**, **MATLAB**, etc.
  - Solid background in software development for both academic and applied projects.
  - Advanced skills in handling hardware peripherals and office automation tools.
  - Experience with a wide range of operating systems.
- Additional tools: **LaTeX**, **HTML**, graphics tools, and other utilities for documentation and presentation.
- Miscellaneous : LaTeX, HTML, Graphics, etc ..

## PUBLICATIONS & SCIENTIFIC COMMUNICATIONS

**Year 2018- 2026**

### **Journals:**

- [1] Alessa, F.M.; Alhaag, M.H.; Nasr, M.M.; Kaid, H.; **Hammami, N.**; Dabwan, A. Evaluation of the Training Efficiency of AR-Based Versus Paper-Based Instruction Methods with Different Levels of Industrial Maintenance Task Complexity. *Appl. Sci.* **2026**, *16*, 2731. <https://doi.org/10.3390/app16062731>
- [2] Alessa, Faisal & Alhaag, Mohamed & Al-Harkan, Ibrahim & Nasr, Mustafa & Kaid, Husam & **Hammami, Nacereddine**. (2023). Evaluating Physical Stress across Task Difficulty Levels in Augmented Reality-Assisted Industrial Maintenance. *Applied Sciences*. 14. 10.3390/app14010363\_
- [3] Mohamed S. Abdo, Ahmed A. Ghanem, **Nacereddine Hammami** et al. Optimized Feature Selection and Classification of Arabic Speech Disorders: A Case Study of Letter /r/ Difficulties, 03 January 2023, PREPRINT (Version 1) available at Research Square <https://doi.org/10.21203/rs.3.rs-2414089/v1>
- [4] Shazly, Khadija, et al. "A Review on Distributed Denial of Service Detection in Software Defined Network." *International Journal of Wireless and Ad Hoc Communication* 5.2 (2022): 08-18. <https://doi.org/10.54216/IJWAC.050201>
- [5] Abdo, Mohamed & Ghanem, Ahmed & **Hammami, Nacereddine** & Youness, Hassan & Hassan, Abdallah. (2022). Optimized Feature Selection and Classification of Arabic Speech Disorders: A Case Study of Letter /r/ Difficulties. 10.21203/rs.3.rs-2414089/v1.
- [6] B. Basti, **N. Hammami**, I. Berrabah, F. Nouioua, R. Djemiat, N. Benhamidouche, Stability analysis and existence of solutions for a modified SIRD model of COVID-19 with fractional derivatives, *Symmetry journal*, 13(8) (2021), 1431. <https://www.mdpi.com/2073-8994/13/8/1431>
- [7] **Hammami, N.**, Lawal, I.A., Bedda, M. et al. Recognition of Arabic speech sound error in children. *Int J Speech Technol* 23, 705–711, 2020. <https://link.springer.com/article/10.1007%2Fs10772-020-09746-3>
- [8] Radia Touahri, Nabiha AZIZI, **N. Hammami**, all , , " Multi source Retinal Fundus Image Classification Using Convolution Neural Networks Fusion and Gabor-Based Texture Representation " *International Journal of Computational Vision and Robotics (IJCVR)*, Apr, 2020. <https://www.inderscience.com/info/ingeneral/forthcoming.php?jcode=IJCVR>

## Conferences :

- [9] **Hammami, Nacer** & Fawzy, Abdelhameed & Alhaag, Mohammed & Alkhuzayim, Ruba & Alsedrani, Ruba & Alenazi, Anas. (2024). Air Pollution and Quality Monitoring Device with an Intelligent Umbrella Based on the Weather Using IoT Technologies. 10.46254/GC02.20240128.
- [10] Alhaag, Mohammed & **Hammami, Nacer** & Alenazi, Anas & AL-Akkad, Omar & Altirbaq, Asim & Alharbi, Faisal & Alkhuzayim, Ruba. (2024). Designing a Smart System for Helping Blind and Visually Impaired People. 10.46254/GC02.20240079.
- [11] M. Lamari, A. Boukhamla, T. A. Lafia, N. Azizi, L. Kouadria and **N. E. Hammami**, "Improved Ensemble-Based Approaches with Stacking for Imbalanced Medical Data Classification," *2024 1st International Conference on Electrical, Computer, Telecommunication and Energy Technologies (ECTE-Tech)*, Oum El Bouaghi, Algeria, 2024, pp. 1-8, doi: 10.1109/ECTE-Tech62477.2024.10851126.
- [12] Rouabhi, R., **Hammami, N. E.**, Azizi, N., Benzebouchi, N. E., & Chaib, R. (2023, December). Multi-label Textual Data Augmentation Using BERT Based on Transformer Model. In *International Conference on Computing and Information Technology* (pp. 164-173). Cham: Springer Nature Switzerland..
- [13] R. Chaib, N. Azizi, **N. E. Hammami**, I. Gasmi, D. Schwab and A. Chaib, "GL-LSTM Model For Multi-label Text Classification Of Cardiovascular Disease Reports," *2022 2nd International Conference on Innovative Research in Applied Science, Engineering and Technology (IRASET)*, 2022, pp. 1-6, doi: 10.1109/IRASET52964.2022.9738147.
- [14] R.Touahri, N.Azizi, **N.Hammami** and B.Farid. "A survey on disc and cup segmentation methods of retina fundus images", 2022 1<sup>st</sup> International Conference on Autonomous Systems and their Applications (ICASA'22), Tarif, Algeria 2022.
- [15] B.Farid, H.Beleili, **N.Hammami** and R.Touahri. "Implementation of the FIR filter under DSP and FPGA (comparative study)", 2022 1<sup>st</sup> International Conference on Autonomous Systems and their Applications (ICASA'22), Tarif, Algeria 2022.
- [16] Mouna Lamari, Nabihazizi, **N. Hammami**, All, " SMOTE-ENN Based Data Sampling and Improved Dynamic Ensemble Selection for Imbalanced Medical Data Classification ",ICACIN, Morocco 2020 (**Best paper reward**)
- [17] M. Al Omari, M. Al-Hajj, A. Sabra and **N. Hammami**, " Hybrid CNNs-LSTM Deep Analyzer for Arabic," 2019 sexth International Conference on Social Networks Analysis, Management and Security (SNAMS), Garnada2019, spain ([URL:https://emergingtechnet.org/SNAMS2019/](https://emergingtechnet.org/SNAMS2019/))
- [18] M. Al Omari, M. Al-Hajj, **N. Hammami** and A. Sabra, "Sentiment Classifier: Logistic Regression for Arabic Services' Reviews in Lebanon," 2019 International Conference on Computer and Information Sciences (ICCIS), Sakaka, Saudi Arabia, 2019, pp. 1-5.  
[URL: http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8716394&isnumber=8716377](http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8716394&isnumber=8716377)
- [19] N. E. Benzebouchi, N. Azizi, **N. E. Hammami**, D. Schwab, M. C. E. Khelaifia and M. Aldwairi, "Authors' Writing Styles Based Authorship Identification System Using the Text Representation Vector," 2019 16th International Multi-Conference on Systems, Signals & Devices (SSD), Istanbul, Turkey, 2019, pp. 371-376.  
[URL: http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8894872&isnumber=8893147](http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8894872&isnumber=8893147)
- [20] R. Touahri, N. AzizI, **N. E. Hammami**, M. Aldwairi and F. Benaïda, "Automated Breast Tumor Diagnosis Using Local Binary Patterns (LBP) Based on Deep Learning Classification," 2019 International Conference on Computer and Information Sciences (ICCIS), Sakaka, Saudi Arabia, 2019, pp. 1-5.  
[URL: http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8716428&isnumber=8716377](http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8716428&isnumber=8716377)
- [21] R. Touahri, N. Azizi, N. E. Benzebouchi, **N. E. HAMMAMI** and O. Moumene, "A Comparative Study of Convolutional Neural Network and Twin SVM for Automatic Glaucoma Diagnosis," 2018 International Conference on Signal, Image, Vision and their Applications (SIVA), Guelma, Algeria, 2018, pp. 1-5.  
[URL: http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8661076&isnumber=8660804](http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8661076&isnumber=8660804)

## Pervious Years :

- [22] **N.Hammami**, M.Bedda,N.farah; S.Mansouri, "/r/-Letter disorder diagnosis (/r/-LDD): Arabic speech database development for automatic diagnosis of childhood speech disorders (Case study)," in *Intelligent Systems and Computer Vision (ISCV)*, 2015 , vol., no., pp.1-7, 25-26 March 2015.

- [23] M. Alruily, **N. Hammami** and M. Goudjil, "Arabic web-based surveillance system for monitoring infectious disease outbreaks," Internet Technologies and Applications (ITA), 2015, Wrexham, 2015, pp. 358-360.
- [24] **N.Hammami**, M.Bedda, N.Farah, R.Lakehal-Ayat "Spoken Arabic Digits recognition based on (GMM) for e-Quran voice browsing: Application for blind category", Proc.IEEE (ICAITHQ'13), Medina, KSA, Sep 2013.  
<http://nooritic.org/sites/default/files/ListofPublicationsEnglishNOORIC1435.pdf>
- [25] **N.Hammami**, M.Bedda, N.Farah, "Probabilistic Classification Based on Gaussian Copula for Speech Recognition: Application to Spoken Arabic Digits", Proc.IEEE (SPA'13), Signal Processing, Poland, Sep 2013.  
<http://ieeexplore.ieee.org/search/searchresult.jsp?newsearch=true&queryText=n+hammami>
- [26] **Hammami Nacereddine**, Mohamed Goudjil and Alruily Meshrif, "Probabilistic Classification Based on Copula for Text categorization: An Overview", Proc. IEEE (ICIA'13) The International Conference on Artificial Intelligence, Jun. 2013.  
<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?tp=&arnumber=6618781&queryText%3DProbabilistic+Classification+Based+on+Copula+for+Text+categorization%3A+An+Overview%E2%80%A99D>
- [27] Alruily Meshrif, **Hammami Nacereddine**, Goudjil Mohamed, "Using Transitivity for developing Arabic Text Summarization System", Proc. IEEE (ICIA'13) The International Conference on Artificial Intelligence, Jun. 2013.  
<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?tp=&arnumber=6618786&queryText%3DUsing+Transitivity+for+developing+Arabic+Text+Summarization+System>
- [28] Mohamed Goudjil, Mouloud Koudil, **Nacereddine Hammami**, Mouldi Bedda and Meshrif Alruily; "Arabic Text Categorization Using SVM Active Learning Technique : An Overview"; Proc. IEEE (ICIA'13) The International Conference on Artificial Intelligence, Jun. 2013.  
<http://ieeexplore.ieee.org/search/searchresult.jsp?newsearch=true&queryText=n+hammami>
- [29] Khelifa, M.A.; Boukabou, A.; **Hammami, N.**, "Data transmission based on chaotic synchronization system," Computer Applications Technology (ICCAT), 2013 International Conference on , vol., no., pp.1,2, Tunisia, 20-22 Jan. 2013.  
<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?tp=&arnumber=6521983&queryText%3DData+transmission+based+on+chaotic+synchronization+system%2C%22+Computer+Applications+Technology>
- [30] **N.Hammami**, M. Bedda, and N. Farah, " Tree distributions approximation model for robust discrete speech recognition" ,International Journal of Speech Technology, Springer, 2012.  
<http://link.springer.com/article/10.1007%2Fs10772-012-9141-9>
- [31] **N.Hammami**, M.Bedda, N.Farah, "Spoken Arabic Digits recognition using MFCC based on GMM," Proc. IEEE, (STUDENT'12) Sustainable Utilization and Development in Engineering and Technology, pp.160,163,Malaysia, 6-9 Oct. 2012.  
<http://ieeexplore.ieee.org/search/searchresult.jsp?newsearch=true&queryText=n+hammami>
- [32] **N. Hammami**, M. Bedda, N.Farah, " Spoken Arabic Digits recognition Using MFCC based on GMM ", IEEE STUDENT'12 Conference, Malaysia, 2012.  
<http://ieeexplore.ieee.org/search/searchresult.jsp?newsearch=true&queryText=n+hammami>
- [33] **N. Hammami**, M. Bedda, N.Farah "The second-order derivatives of MFCC for improving spoken Arabic digits recognition using Tree distributions approximation model and HMMs," Communications and Information Technology (ICCIT), 2012 International Conference on , vol., no., pp.1,5, Tunisia, 26-28 June 2012.  
<http://ieeexplore.ieee.org/search/searchresult.jsp?newsearch=true&queryText=n+hammami>
- [34] **N. Hammami**, M. Bedda, N.Farah "HMM parameters estimation based on cross-validation for Spoken Arabic Digits recognition," Communications, Computing and Control Applications (CCCA), 2011 International Conference on , vol., no., pp.1,4,Tunisia, 3-5 March 2011.  
<http://ieeexplore.ieee.org/search/searchresult.jsp?newsearch=true&queryText=n+hammami>
- [35] **N. Hammami**, M. Bedda "Improved tree model for arabic speech recognition," Computer Science and Information Technology (ICCSIT), 2010 3rd IEEE International Conference on , vol.5, no., pp.521,526,China, 9-11 July 2010.  
<http://ieeexplore.ieee.org/search/searchresult.jsp?newsearch=true&queryText=n+hammami>

- [36] **N. Hammami**, M. Bedda, Adaptation and preprocessing of the Repository dataset:"spoken Arabic digit", <http://archive.ics.uci.edu/ml/datasets/Spoken+Arabic+Digit>
- [37] **N. Hammami**, M. Sellami "Tree distribution classifier for automatic spoken Arabic digit recognition," Internet Technology and Secured Transactions, 2009. ICITST 2009. International Conference for , vol., no., pp.1,4,UK, 9-12 Nov. 2009  
<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?tp=&arnumber=5402575&queryText%3DTree+distribution+classifier+for+automatic+spoken+Arabic+digit+recognition>
- [38] A.Douzal, **N. Hammami**,C.gabry, "Local Analysis of multivariate time series". ISI 2007 (International Statistical Institute), Portugal 2007  
<http://hal.archives-ouvertes.fr/docs/00/36/04/89/PDF/ISII-07.pdf>

## REFERENCES AVAILABLE UPON REQUEST

- **Pr. Mouldi BEDDA**,  
Faculty of Engineering  
University of Al Jouf  
Sakaka, Kingdom of Saudi Arabia  
Mouldi\_bedda@yahoo.fr
- **Pr. Jacques DEMONGEOT**,  
Director of the laboratory TIMC-IMAG (Techniques of Medical Engineering and Complexity – Computer Science, Mathematics and Applications of Grenoble- France).  
<http://www-timc.imag.fr>.
- **Pr. Daoudi Mohamed**,  
Professor in Computer Science and supervising of my Master's training, University of Lille - France.  
<http://www.telecom-lille1.eu/people/daoudi/index.htm>.
- **Pr. Jean-Yves Ramel**,  
Lecturer, Teacher Searcher at Poly Tech Tours, Department of Computer Science and Responsible(2) of the staff: Forms recognition and Images Analysis, <http://www.li.univ-tours.fr/>

## LANGUAGE

**Arabic:** Native – **English:** Very Good (Fluent) – **French:** Very Good (Fluent)

## CULTURAL & SPORTS ACTIVITIES

- **Interested in** Arabic literature, philosophy, and Islamic studies,
- **Sports:** Football, Swimming, table tennis, PC chess.