

CURRICULUM VITAE

Prof. Youssef ELMIR, Qualified for Full Professor & Associate Professor (CNU Sections 27 & 61, France, 2026).
Full Professor in Computer Science (BEng, MSc, DSc & University Habilitation), Age: 43.
[École supérieure en Sciences et Technologies de l'Informatique et du Numérique \(ESTIN\)](#), Bejaia, Algeria.

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Profiles: [Google Scholar](#), [ResearchGate](#), [Scopus](#), [Web of Sciences](#), [Linkedin](#)

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1. EDUCATION & ACADEMIC PROMOTIONS:

1.1. PROMOTIONS:

- 01/2025: **Full Professor, National University Commission (Algeria. Session n°51)**,
[École supérieure en Sciences et Technologies de l'Informatique et du Numérique \(ESTIN\)](#)
- 02/2020: **University Habilitation (Habilitation to Direct Research)**,
[Université de Djillali Liabes - Sidi Bel Abbes \(UDL\)](#)

1.2. DEGREES:

- 03/2009 - 05/2015: **Doctorate in Sciences (DSc) in Computer Science, «A Hierarchical Fusion Strategy in Multi-Biometric Authentication Systems»**,
[Université de Djillali Liabes - Sidi Bel Abbes \(UDL\)](#)
- 10/2005 - 12/2007: **Magistère (MSc) in Computer Science, «Individuals Identification by their Fingerprints»**,
[Université des Sciences et Technologie d'Oran - Mohammad Boudiaf \(USTO\)](#)
- 09/2000 - 07/2005: **Ingénieur d'état (BEng) in Computer Science, «Speaker Recognition»**,
[Université de Djillali Liabes - Sidi Bel Abbes \(UDL\)](#)

1.3. CERTIFICATIONS:

- 2025/2026: **Qualification for Full Professor (PU), Sections 27 & 61**,
[Conseil National des Universités CNU, France, 2026](#)
- 2025/2026: **Qualification for Associate Professor (MCF), Sections 27 & 61**,
[Conseil National des Universités CNU, France, 2026](#)
- 2024/2025: **GPU Cluster Administration Training (Architecture, Installation, Kubernetes, Kubeflow)**,
[UMAITEK ALGERIE](#)
- 2024/2025: **Algeria English for Teaching 3 (EfT3), C1-Advanced level**,
[British Council Algeria](#)
- 2023/2024: **English training (Sessions online & in-person, B2 level)**,
[Ministère de l'Enseignement Supérieur et de la Recherche Scientifique \(MESRS\)](#)
[École supérieure en Sciences et Technologies de l'Informatique et du Numérique \(ESTIN\)](#)

- 05/2011 : **French as a Foreign Language (FLE)**,
[Université Montesquieu Bordeaux IV, Institut Universitaire de Formation des Maitres d'Aquitaine IUFM](#)
- 05/2010 : **Algerian Summer School on Biometrics (ASSB'2010)**,
[Centre de Développement des Technologies Avancées \(CDTA\)](#)

2. PROFESSIONAL EXPERIENCE:

2.1. TEACHING:

- **SINCE 01/2025: Full Professor**,
[École supérieure en sciences et technologies de l'informatique et du Numérique – ESTIN](#)
 - Operating Systems, (2025-2026)
 - Object-Oriented Programming, (2024-2025 → 2025-2026)
- **09/2021 - 12/2024: Associate Professor class A**,
[École supérieure en sciences et technologies de l'informatique et du Numérique – ESTIN](#)
 - Object-Oriented Programming, (2021-2022 → 2023-2024)
 - Operating Systems, (2021-2022 → 2024-2025)
 - Artificial Intelligence, (2021-2022)
 - ICT, (2021-2022).
- **02/2020 - 08/2021: Associate Professor class A**,
[Université Tahri Mohammed de Béchar - UTMB](#)
 - Operating Systems, (2019-2020 → 2020-2021).
 - Logic Programming, (2020-2021).
 - Advanced Optimisation, (2019-2020 → 2020-2021).
 - Natural Language Processing, (2020-2021).
- **05/2015 - 02/2020: Associate Professor class B**,
[Université Tahri Mohammed de Béchar - UTMB](#)
 - Operating Systems, Logic Programming, Modelling and Simulation & Advanced Optimisation.
- **01/2014 - 04/2015: Assistant Professor class A**,
[Université Tahri Mohammed de Béchar - UTMB](#)
 - Operating Systems, Logic Programming & Advanced Databases.
- **12/2008 - 12/2013: Assistant Professor class B & class A**,
[Université d'Adrar](#)
 - Databases, Neural Networks, Expert Systems, Operating Systems, Logic Programming, Compilation & Human Computer Interface.

2.2. SUPERVISION OF FINAL YEAR PROJECTS:

- **MSC THESES:**
 1. L. Belmedrek, "Optimizing Deep Learning Algorithms for Enhanced Brain Cancer Medical Image Segmentation", ESTIN, 2025-2026.
 2. W. Slimani, "Intelligent Multimodal System for Diagnosis and Prognosis Support of Colorectal Cancer", ESTIN, 2025-2026.
 3. A. Ameur, "Data Curation and Knowledge Integration for AI-Ready Cereal Databases (Constantine & Adrar)", ESTIN, 2025-2026.
 4. A. Douaibia, D. Falouz, "An Intelligent Energy Monitoring Assistant Based on Deep Learning and Agentic AI for Smart Buildings: A Comprehensive State of the Art", ESTIN, 2025-2026.

5. F. Toukali, "Artificial Intelligence for crop yield forecasting by analysing agro-climatic indices", ESTIN, 2024-2025, ongoing.
6. R. Amira, A. DRAA, "AI-Based Crop Classification from Satellite Imagery: Enhancing Agricultural Monitoring", ESTIN, 2024-2025.
7. O. Melizou, H. Touati, "Review of Techniques for Optimizing Intelligent Video Recording Using Activity Detection in Surveillance Systems", ESTIN, 2023-2024.
8. A. Abdelaziz, "Réalisation d'un Système Biométrique Embarqué basé sur le Réseau GSM", Université Tahri Mohammed de Béchar, 2020-2021.
9. H. Elmir, "Realization of a Road Traffic Prediction System", Université Tahri Mohammed de Béchar, 2020-2021.
10. H. Torki, "IoT dans le transport public", Université Tahri Mohammed de Béchar, 2019-2020.
11. T. Nemoura, M. Boura, "Accès Restreint Basé sur identification Biométrique", Université Tahri Mohammed de Béchar, 2019-2020.
12. M. Bendida, "Réalisation d'un système d'identification des maladies à partir des dossiers médicaux électroniques", Université Tahri Mohammed de Béchar, 2019-2020.
13. Y. Ferdi, "Réalisation et Optimisation d'un Système Multi-biométrique -la Fusion au niveau des Scores basé sur les Algorithmes Génétiques", Université Tahri Mohammed de Béchar, 2018-2019.
14. A. Kacemi, Y. Regueig, "Conception et Réalisation d'un Système Expert Juridiques de Consultation -le code de la Famille Algérien-", Université Tahri Mohammed de Béchar, 2018-2019.
15. M. Sabri, "Implémentation d'un Système Multi-Biométrique basé sur la fusion au niveau des Classificateurs", Université Tahri Mohammed de Béchar, 2017-2018.
16. L. Hamdaoui, S. Laouar, "La Détection des Armes dans le Sequences Video", Université Tahri Mohammed de Béchar, 2017-2018.
17. Y. Mehdaoui, A. Abbassi, "La Reconnaissance de Expressions Faciales", Université Tahri Mohammed de Béchar, 2016-2017.
18. A. Benayad, R. Touhami, "La Reconnaissance des Gestes de la Main", Université Tahri Mohammed de Béchar, 2015-2016.
19. S. Kail, D. Ghazi, "La Reconnaissance Biométrique de la Frappe au Clavier", Université Tahri Mohammed de Béchar, 2015-2016.
20. N. Khelifi, "Un Système Biométrique basé sur la Fusion des Empreintes Digitales et les Veines des Doigts", Université Tahri Mohammed de Béchar, 2014-2015.
21. M. Soumeur, "Un Réseau Social Basé sur l'Authentification Biométrique", Université d'Adrar, 2013-2014.
22. A. Oued Bahamou, B. Bouchareb, "Un Système Biométrique Multimodal", Université d'Adrar, 2012-2013.
23. H. Soulamani, "Data Mining appliqué au Système Biométrique Multimodal (visage et empreinte digitale)", Université d'Adrar, 2012-2013.
24. H. Bouziane, "Un système automatique pour la génération des emplois du temps basé sur le logiciel national gestion de scolarité SEES", Université Abou Bakr Belkaid - Tlemcen, 2011-2012.

- **BENG THESES:**

1. L. Belmedrek, "Optimizing Deep Learning Algorithms for Enhanced Brain Cancer Medical Image Segmentation", ESTIN, 2025-2026.
2. Y. Koudia, "Design and Implementation of a Digital Bus Information System for Urban Transportation", ESTIN, 2025-2026.
3. C. Amroun, "Data Generation and Transfer Learning for Wheat Monitoring (Constantine & Adrar)", ESTIN, 2025-2026.
4. W. Slimani, "Intelligent Multimodal System for Diagnosis and Prognosis Support of Colorectal Cancer", ESTIN, 2025-2026.
5. A. Ameur, "Data Curation and Knowledge Integration for AI-Ready Cereal Databases (Constantine & Adrar)", ESTIN, 2025-2026.
6. A. Douaibia, D. Falouz, "An Intelligent Energy Monitoring Assistant Based on Deep Learning and Agentic AI for Smart Buildings", ESTIN, 2025-2026.
7. A. Bouzena, "Data Engineering and Fusion for Flood Prediction", ESTIN, 2025-2026, ongoing.
8. B. Messaoudi, "Flood Detection Using Satellite Imaging", ESTIN, 2025-2026.
9. A. Y. Atoui, "Flood Prediction Using Sensor Time-Series Data", ESTIN, 2025-2026.
10. F. Toukali, "Artificial Intelligence for crop yield forecasting by analysing agro-climatic indices in Algeria", ESTIN, 2024-2025, ongoing.

11. R. Amira and A. DRAA, "AI-Based Crop Classification from Satellite Imagery: Enhancing Agricultural Monitoring in Algeria", ESTIN, 2024-2025.
12. Z. Alaimia, "Development of an Edge Computing-based Wearable Health Monitoring System", ESTIN, 2023-2025.
13. O. Melizou, H. Touati, "Intelligent Video Recording optimization using Activity Detection for ESTIN Surveillance Systems", ESTIN, 2023-2024.

- **BSC THESES:**

1. H. Elmir, Y. Labdaoui, "Conception et Réalisation d'un Système Expert Juridiques d'Héritage", Université Tahri Mohammed de Béchar, 2018-2019.
2. A. Boudjenah, S. Allali, "Réalisation d'une interface de commande de MS-Windows", Université Tahri Mohammed de Béchar, 2017-2018.
3. B. Boudi, S. Chebbah, "Réalisation d'un Site web de la ville de Béchar", Université Tahri Mohammed de Béchar, 2017-2018.
4. N. E. Abdennour, W. Bali, "Réalisation d'un site web du Freelance", Université Tahri Mohammed de Béchar, 2016-2017.
5. M. Amirouche, "Acquisition et Traitement des Séquences Vidéo", Université Tahri Mohammed de Béchar, 2015-2016.
6. O. Lamri, A. Mehdaoui, "Un Composant Joomla Pour la Gestion des Annonces des Conférences Scientifiques", Université Tahri Mohammed de Béchar, 2014-2015.
7. A. Amiri, D. Boucha, I. Boulhares, "Joomla! Component for the Setting Online of S.E.E.S software's data", Université d'Adrar, 2013-2014.
8. A. Temri, I. E. Bourakba, R. Rahmouni, "Iris Recognition based Biometric System", Université d'Adrar, 2013-2014.
9. F. Elhor, W. Elhor, "Un Réseau Social pour l'Université Algérienne", Université d'Adrar, 2013-2014.
10. N. Karour, S. Ouled jaafri, "Online Signature Based Biometric System", Université d'Adrar, 2012-2013.
11. N. Bouchentouf, M. Badjenna, "Un Système En ligne pour la Gestion des Infractions de la Circulation Routière « Cas daïra d'Adrar »", Université d'Adrar, 2012-2013.
12. O. Ghazaoui, F. Boukenni, "Un Système Biométrique Bimodale (voix et empreinte digitale)", Université d'Adrar, 2010-2011.
13. H. Bouziane, F. Barkaoui, "Développement d'un système de gestion d'emploi du temps", Université d'Adrar, 2009-2010.

- **1. APPLICATION ENGINEER THESES:**

1. N. Bennasroune, "Conception et réalisation d'un système d'information en ligne pour la gestion de prêt au niveau de l'Agence Nationale de Gestion du Micro Crédit", Chambre Algérienne de Commerce et d'Industrie, 2010.

2.3. RESEARCH:

1. **SINCE 01/2025: Research Director (Project Investigator),**
PRFU - Projet de Recherche-Formation Universitaire (reconduit): "Un système de santé intelligent et sécurisé pour la surveillance, la prédiction et la détection des maladies".
[École supérieure en Sciences et Technologies de l'Informatique et du Numérique - ESTIN](#)
2. **SINCE 09/2024: Senior Research Fellow class A (Member),**
PNR - Projet National de Recherche: "Application de l'innovation numérique dans l'accroissement des performances de la filière céréalière".
[École supérieure en Sciences et Technologies de l'Informatique et du Numérique - ESTIN](#)
3. **01/2023 - 12/2024: Senior Research Fellow class A (Project Investigator),**
PRFU - Projet de Recherche-Formation Universitaire: "Un système de santé intelligent et sécurisé pour la surveillance, la prédiction et la détection des maladies".
[École supérieure en Sciences et Technologies de l'Informatique et du Numérique - ESTIN](#)
4. **11/2022 - 11/2024: Director of Research Laboratory,**
"Laboratoire d'Informatique et des Technologies Avancées du Numérique".
[École supérieure en Sciences et Technologies de l'Informatique et du Numérique - ESTIN](#)
5. **SINCE 01/2022: Associated Member,**
PNR - Projet National de Recherche: "Conception et Réalisation d'un Prototype SmartAqua. un Système de Surveillance Intelligent, avec Correction Automatique de la Qualité d'Eau, Alimenté par des Energies

Renouvelables Dédiées à l'Aquaculture Continentale”.

[Université Tahri Mohammed de Béchar \(UTMB\)](#)

6. 04/2019 - 08/2021: **Deputy Director of Research Laboratory, in Charge of Human Resources Management and Scientific Production,**
[“Smart Grids & Renewable Energies Laboratory”, Université Tahri Mohammed de Béchar \(UTMB\)](#)
7. 01/2019 - 12/2023: **Senior Research Fellow class B (Member),**
Projet à impact socio-économique: Application des services web sémantiques dans le domaine des analyses médicales – solution cloud,
[Université Tahri Mohammed de Béchar \(UTMB\)](#)
8. 01/2013 - 12/2014: **Research Fellow (Member),**
CNEPRU project (Comité National d'Evaluation et de Programmation de la Recherche Universitaire): **Social Semantic Web Mining,**
[Université de Djillali Liabes–Sidi Bel Abbes \(UDL\)](#)
9. 06/2012 - 08/2012: **Research Assistant (Member),**
Internal project: Embedded Intelligent Multimodal Biometric Platform: Fusion of Face, Voice and Signature
(Roles: design, development, scientific redaction and publication),
[Qatar University - Doha - Qatar](#)
10. 01/2011 - 12/2012: **Research Fellow (Member),**
CNEPRU project (Comité National d'Evaluation et de Programmation de la Recherche Universitaire): **Semantic Web Mining,**
[Université de Djillali Liabes – Sidi Bel Abbes \(UDL\)](#)
11. 01/2010 - 12/2010: **Research Associate (Membre),**
CNEPRU project (Comité National d'Evaluation et de Programmation de la Recherche Universitaire): **Semantic Web Mining,**
[Université de Djillali Liabes – Sidi Bel Abbes \(UDL\)](#)

2.4. SUPERVISION AND CO-SUPERVISION OF DOCTORAL THESES:

1. Ouassila Amir, “Privacy-preserving data analytics at scale - Application to smart agriculture”, 2024-2025 → ongoing, (co-supervision with Pr. Mohand Tahar KECHADI).
2. Narima Alkama, “Amélioration de la détection d'anomalies dans les séquences vidéo pour la sécurité énergétique”, 2024-2025 → ongoing, (co-supervision with Dr. Seif Eddine BENKABOU).
3. Ramzi Badache, “Multimodal anomaly detection for cardiomyopathy diagnosis from multi-source data”, 2024-2025 → ongoing, (co-supervision with Dr. Khalid BENABDESLAM).
4. Sif Eddine Baouz, “Modèles de Transformers pour le diagnostic des troubles dépressifs à partir des données Électroencéphalogrammes”, 2024-2025 → ongoing, (co-supervision with Pr. Larbi BOUBCHIR).
5. Faiçal Hima, “Neuro-Symbolic Approaches for Advanced Biological Data Management and Analysis”, 2024-2025 → ongoing, (co-supervision Pr. Lhouari NOURINE).
6. Hadda Messalti, “Adaptive Defense Strategies Using LLMs : Developing context- aware security protocols for dynamic threat landscapes”, 2024-2025 → ongoing, (co-supervision with Dr. Yassine HIMEUR).
7. Abdelkader Tagmouni, “Human activity recognition for healthcare applications”, 2022-2023 → ongoing, (co-supervision with Pr. Mohand Tahar KECHADI).
8. Ahmed Cherif Cherif, “Secure access to patient medical data”, 2022-2023 → ongoing, (supervision with Dr. Yassine HIMEUR).
9. Amine Bechar, “Disease detection through clinical data analysis”, Mars 2023 → July 2026, (supervision with Dr. Rafik MEDJOUJ).

10. Selestine Melchane, “Un système de santé intelligent pour la prédiction et la prévision des maladies transmissibles”, Mars 2022 → June 2026, (“Supervision with Dr. Farid KACIMI, under a joint doctoral degree agreement with Pr. Larbi BOUBCHIR of Université Paris 8).
11. Feriel Khennouche, “Amélioration de l’expérience utilisateur basée sur les chatbots”, 2021-2022 → ongoing, (supervision with Dr. Nabil DJEBARI).
12. Younes Khair, “Une Gestion Intelligente du Transport à la Demande”, 2018-2019 → 2021-2022, (co-supervision with Pr. Abdeslam DENNAI).
13. Saliha Benkerzaz, “Human Machine Interaction Based on Computer Audio-Visual”, 2017-2018 → 2024-2025, (co-supervision with Pr. Abdeslam DENNAI).

2.5. ADMINISTRATIVE RESPONSIBILITIES:

1. 05/2023 - 10/2025: **Vice-Director in Charge of Doctoral Training, Scientific Research, Technological Development, Innovation, and the Promotion of Entrepreneurship**,
[École supérieure en Sciences et Technologies de l'Informatique et du Numérique – ESTIN](#)
2. SINCE 12/2022: **Head of the Doctoral Training Committee (Accredited in 2022-2023)**,
[École supérieure en Sciences et Technologies de l'Informatique et du Numérique – ESTIN](#)
3. SINCE 11/2022: **Chair of the Local Committee for the Promotion of Visibility and Ranking**,
[École supérieure en Sciences et Technologies de l'Informatique et du Numérique - ESTIN](#)
4. 03/2022 - 01/2025: **Quality Assurance Manager**,
[École supérieure en Sciences et Technologies de l'Informatique et du Numérique - ESTIN](#)
5. 07/2018 - 10/2020: **Master’s Program Coordinator – Advanced Information Systems**,
Department of Mathematics and Computer Science, [Université Tahri Mohammed de Béchar \(UTMB\)](#)
6. 10/2012 - 12/2013: **Vice-Dean in Charge of Post-Graduate Studies, Scientific Research, and External Relations**,
Faculté of Sciences and Technology, [Université d’Adrar](#)
7. 09/2011 - 10/2013: **Head of the University Website Monitoring Unit**,
[Université d’Adrar](#)
8. 05/2011 - 10/2012: **Deputy Head of Department in Charge of Post-Graduate Studies and Scientific Research**,
Department of Mathematics and Computer Science, [Université d’Adrar](#)

2.6. INDUSTRIAL EXPERIENCE:

- 09/2006 - 12/2008: **State Engineer in Computer Science**,
[Agence Nationale de Gestion du Micro-crédit - ANGEM](#)

3. DIVERS:

3.1. TECHNICAL SKILLS:

- **Python** (Scikit-learn, TensorFlow, PyTorch, NLTK, Scholarly, etc.)
- **MATLAB** (Image/Signal processing, neural networks, pattern recognition, optimisation)
- **PHP, MySQL & CMS** (Joomla, WordPress)
- Basics of **C/C++, Java & JavaScript**
- Basics of **Arduino & Raspberry Pi**

3.2. INTERESTS:

- Fishing, bird breeding, and outdoor leisure.

4. PUBLICATIONS:

Names in bold represent my students and PhD candidates, while my own name is underlined.

ARTICLES IN PEER-REVIEWED INTERNATIONAL JOURNALS

- [1] **A Bechar**, A Amira, A Oulefki, Y Elmir and Y Himeur, "2D GAF-Enhanced Multimodal Vision Language Model for Breathing Patterns Analysis via ECG Sensing", IEEE Sensors Journal (2025), DOI: [10.1109/JSEN.2025.3617772](https://doi.org/10.1109/JSEN.2025.3617772)
- [2] **S Melchane**, Y Elmir, F Kacimi and L Boubchir, "A decision support approach to infectious disease classification using tweets and routine blood tests", Network Modeling Analysis in Health Informatics and Bioinformatics 14, no.1 (2025): 101, DOI : <https://doi.org/10.1007/s13721-025-00593-3>
- [3] **A Bechar**, R Medjoudj, Y Elmir, Y Himeur and A Amira, "Federated and transfer learning for cancer detection based on image analysis", Neural Computing and Applications 37, no.4 (2025): 2239-2284, DOI : <https://doi.org/10.1007/s00521-024-10956-y>
- [4] Y Elmir, **H Elmir** and Y Khair, "Road Traffic Prediction System Using Deep Neural Multilayer Perceptron (MLP)", Transport technic and technology 20, no.2 (2025): 1-9, DOI: <https://doi.org/10.2478/ttt-2024-0005>
- [5] **F Khennouche**, Y Elmir, Y Himeur, N Djebbari and A Amira, "Revolutionizing generative pre-trained: Insights and challenges in deploying ChatGPT and generative chatbots for FAQs", Expert Systems with Applications 246, (2024): 123224, DOI: [10.1016/j.eswa.2024.123224](https://doi.org/10.1016/j.eswa.2024.123224)
- [6] **A Bechar**, Y Elmir, R Medjoudj, Y Himeur and A Amira, "Transfer learning for cancer detection based on images analysis", Procedia Computer Science 239, (2024): 1903-1910, <https://doi.org/10.1016/j.procs.2024.06.373>
- [7] **Y Khair**, A Dennai and Y Elmir, "Cloud-based demand-responsive transportation system using forecasting model", Arabian Journal for Science and Engineering 49, no.3 (2024): 3829-3843, DOI : <https://doi.org/10.1007/s13369-023-08102-2>
- [8] **S Melchane**, Y Elmir, F Kacimi and L Boubchir, "Artificial Intelligence for Infectious Disease Prediction and Prevention: A Comprehensive Review", ACTA UNIVERSITATIS SAPIENTIAE, Informatica; 16, 2 (2024), 160-197; doi: <https://doi.org/10.47745/ausi-2024-0010>
- [9] Y Elmir, **H Touati** and **O Melizou**, "Intelligent Video Recording Optimization using Activity Detection for Surveillance Systems", ACTA UNIVERSITATIS SAPIENTIAE, Informatica; 16, 2 (2024), 286-306; DOI: [10.47745/ausi-2024-0015](https://doi.org/10.47745/ausi-2024-0015)
- [10] Y Elmir, **A Abdelaziz** and M Haidas, "Design and Implementation of Embedded Biometric-Based Access Control System with Electronic Lock using Raspberry Pi", J. Ilm. Tek. Elektro Komput. Dan Inform. JITEKI 9, no.2 (2023): 429-443, DOI: <https://doi.org/10.26555/jiteki.v9i2.26162>
- [11] Y Elmir, "Transfer Learning-Based Real-Time Handgun Detection", Iraqi Journal of Sciences, (2023), DOI: [10.24996/ijs.2024.65.12.31](https://doi.org/10.24996/ijs.2024.65.12.31)
- [12] **S Benkerzaz**, A Dennai and Y Elmir, "Advancing Human-Computer Interaction: A Deep Learning Approach to Eye Tracking", Tobacco Regulatory Science (TRS) 9, no.1 (2023): 5229-5239, DOI: [10.18001/TRS.9.1.363](https://doi.org/10.18001/TRS.9.1.363)
- [13] **Y Khair**, A Dennai and Y Elmir, "Dynamic and elastic monitoring of VMs in cloud environment.", Journal of Supercomputing 78, no.17 (2022), DOI: [10.1007/s11227-022-04624-y](https://doi.org/10.1007/s11227-022-04624-y)
- [14] Y Elmir and **M Bendida**, "A Disease Identification System using Electronic Medical Records", Journal of Intelligent Computing 12, no.1 (2021): 8, DOI: [10.6025/jic/2021/12/1/8-24](https://doi.org/10.6025/jic/2021/12/1/8-24)
- [15] **S Benkerzaz**, Y Elmir and A Dennai, "A study on automatic speech recognition", Journal of Information Technology Review 10, no.3 (2019): 77-85, DOI: [10.6025/jitr/2019/10/3/77-85](https://doi.org/10.6025/jitr/2019/10/3/77-85)
- [16] Y Elmir and **N Khelifi**, "Secured biometric identification: hybrid fusion of fingerprint and finger veins", International Journal of Information Technology and Computer Science 11 (5 ... (2019), DOI : [10.5815/ijitcs.2019.05.04](https://doi.org/10.5815/ijitcs.2019.05.04)
- [17] Y Elmir, **N Karour** and **SO Jaafri**, "A Reduced Feature Representation based Online Signature Authentication", Journal of Information Security Research 10, no.2 (2019): 39-47, DOI: [10.6025/jisr/2019/10/2/39-47](https://doi.org/10.6025/jisr/2019/10/2/39-47)
- [18] Y Elmir and **M Soumer**, "Model-View-Controller based Online Face Recognition System.", Int. J. Web Appl. 11, no.2 (2019): 49-57, DOI: [10.6025/ijwa/2019/11/2/49-57](https://doi.org/10.6025/ijwa/2019/11/2/49-57)
- [19] Y Elmir, Z Elberichi and R Adjoudj, "Multimodal Biometric Using a Hierarchical Fusion of a Person's Face, Voice, and Online Signature", Journal of Information Processing Systems 10, no.4 (2014): 555-567, DOI: [10.3745/JIPS.02.0007](https://doi.org/10.3745/JIPS.02.0007)

- [20] Y Elmir, Z Elberichi and R Adjoudj, "Liquid State Machine Based Fingerprint Identification", Australian Journal of Basic and Applied Sciences 5, no.5 (2011): 857-865

COMMUNICATIONS IN PEER-REVIEWED INTERNATIONAL CONFERENCE WITH PROCEEDINGS

- [1] **Z. Alaimia**, L Boubchir, and Y Elmir, "On the Use of Graph Convolutional Network for Detecting Major Depressive Disorders using EEG Signals", IEEE BIBM2025 (2025). DOI: [10.1109/BIBM66473.2025.11356582](https://doi.org/10.1109/BIBM66473.2025.11356582)
- [2] Y Elmir, Y Himeur and A Amira, "Federated Learning with Gramian Angular Fields for Privacy-Preserving ECG Classification on Heterogeneous IoT Devices", IEEE ComComAp (2025), DOI: [10.1109/ComComAp68359.2025.11353133](https://doi.org/10.1109/ComComAp68359.2025.11353133)
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