

# Lazhar Khriji

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## Education

- 2005 HDR (*Habilitation in Electronics*), National Engineering School of Sfax (ENIS), University of Sfax, Tunisia.
- 2002 Doctor of Technology (*Information Technology*), Institute of Signal Processing, Tampere University of Technology, TUT, Finland, <http://www.cs.tut.fi>
- 1999 PhD (*Electrical Eng.*), Cooperation between the College of Science, University of Tunis El-Manar, and Tampere University of Technology, TUT, Finland.
- 1992 Master of Science (*Electrical Eng.: Automation & Control*), ESSTT, "Higher School of Sciences and Techniques of Tunis", University of Tunis, Tunisia. <http://www.esstt.rnu.tn/>
- 1990 Bachelor of Science (*Electronics*), College of Science, University of Tunis El-Manar. <http://www.fst.rnu.tn/>

## Employment Information

- May 2008 to Present: Associate Professor, Department of Electrical and Computer Engineering, College of Eng., Sultan Qaboos University, Oman.
- Jan. 2002 - May 2008: Assistant Professor, Department of Electrical and Computer Engineering, College of Engineering, Sultan Qaboos University, Oman.
- July 2000 – Jan. 2002: Assistant Professor, Department of Electrical Engineering, National Engineering school of Monastir, University of Monastir, Tunisia.
- Feb. 1997- Sept. 2000: Researcher, Institute of Signal Processing, Tampere University of Technology TUT, Tampere, Finland. On leave from ENIM, Monastir University, Tunisia. <https://www.tuni.fi/en>
- Sept.1993 - July 2000: Lecturer, Department of Electrical Engineering, National Engineering school of Monastir (ENIM), University of Monastir, Tunisia. <http://www.enim.rnu.tn>

## Awards and Recognition

- 2021 : IEEE MGA Outstanding Small Section Award - Contributed actively with IEEE Oman section as chair of the technical activities to receive this award.
- 2014 : National Research Awards in the research area Environmental and Biological Resources, Article entitled "Detecting Surface Cracks on Dates Using Color Imaging Technique".
- 2021 : Letter of Appreciation from the HoD of ECE department, Sultan Qaboos University for the efforts in leading the HSE committee in the department, December 2021.
- 2021 : Certificate of Appreciation from the Dean of College of Arts and Social Sciences, Sultan Qaboos University for the contribution to the 22nd International Arab Conference on Information Technology (ACIT'2021), December 2021.
- 2021 : Certificate of Appreciation from the General Chair of BASNet School at German Chemnitz University of Technology, for the contribution to "International School on Sensors for Body Area Networks (BASNet)", Germany, June 2021.
- 2020 : Certificate of Recognition from IEEE Oman section for the efforts in supporting the section.
- 2020 : Letter of Appreciation from the HoD of ECE department, Sultan Qaboos University for the efforts in leading the HSE committee in the department, September 2020.
- 2019: Letter of Recognition from the Chief of Staff of the Armed Forces of Sultanate of Oman for contributing in the workshop of "Artificial Intelligence Applications", Center for Defense Studies, Muscat, Sept. 2019.
- 2015 : Letter of Appreciation from the Chairman of IEEE Oman section for my efforts and contribution to the success of 8<sup>th</sup> IEEE-GCC Conference, February 2015.
- 2014 : Letter of Appreciation from the Vice Chancellor of Sultan Qaboos University for the efforts and contributions extended toward ABET Accreditation of ECE and MCTE Engineering Programs, December 2014. In Fall 2013, both programs were assessed and fully accredited by ABET.
- 2014 : Letter of Appreciation and encouragement from the Vice Chancellor of Sultan Qaboos University for contributing in attaining a remarkable milestone for SQU research on the platform of the Research Analytics Website - ResearchGate to mount SQU among the top three Universities in the GCC.
- 2010 : Letter of Appreciation from the Vice Chancellor of Sultan Qaboos University for the efforts and contributions extended toward ABET Accreditation of ECE and MCTE Engineering Programs, March 2010.

## Teaching Activities Outside the Classroom

- Supervising student's seminars and reports (known as Directed Studies), ECE Dept., SQU
- Involve SQU students as research assistants in funded research projects.
- Animation (and assistance in the organization) of seminars for FYP students.

- Contribute to SQU University Day through poster presentations.
- Conducted following professional Short courses for the Omani army:
  - 1) Communications, Radars and Satellites, (5 times at SQU) [Nov. 30 - Dec. 4, 2014], [Oct. 27-31, 2013], [Nov. 3-7, 2012], [Nov. 5-9, 2011], [October 23-27, 2010].
  - 2) Electronics & Electrical Eng, (5 times at SQU) [Nov. 30 - Dec. 4, 2014], [Oct. 27-31, 2013], [Nov. 3-7, 2012], [Nov. 5-9, 2011], [October 23-27, 2010].
  - 3) Electromagnetic waves and applications, (4 times at SQU) [Nov. 2009], [Nov. 2008], [Nov. 2007], [Nov. 2006].

#### Membership in Professional Organizations

- Member, Institute of Electrical and Electronics Engineering, IEEE-Oman section, since 2000.
- Member, KES, since 2011.
- Member, IAENG, since January 2022.

#### Service Activities

- Director of Virtual Clinics Project (*Administrative Position*), part of the implementation of SQU`s Vision 2040 strategy.
- Associate Editor: SQU Journal of Engineering Research; (Oct 2008 - Present).
- Chair: Information and Communication Technology Committee, College of Eng., (Sept. 2019-present).
- Member: Risk Management Committee, College of Eng., ECE Dept representative, (2015-present).
- Chair: Health-Safety-Risk Management Committee, ECE Dept (Sept. 2015 – present)
- Deputy Chair: ECE Final Year Project Committee (Sept. 2018 – present)

#### Service to the Profession and Community

- Member, Institute of Electrical and Electronics Engineering, IEEE-Oman section, since 2000.
- Member, KES, since 2011.
- Member, IAENG, since January 2022.

#### Organizing committee member

- ACIT'2021; ISTAIM2020; ATSIP'2018; SSD'2013; ICCCP'09; ICCCP'07; ACIDCA-ICMI'2005; ICCCP'05; ISCCSP'2004; ICM'2004; Net-Con'2003.

#### Technical program committee member

- FRUCT32; BEST 2022; FRUCT31; SETIT 2022; ACIT'2021; SCS'21; FRUCT30; FRUCT29; FRUCT28; DASA'20; IEMTRONICS 2020; FRUCT27; FRUCT26; SCS 2019; ICMSAO'2019; IEEE-GCCE 2019; VMS2019; FOSSC'2019; IEEE-GCC 2017; IEEE-GCC 2015; ISCAS 2014; ISCAS 2013; SSD 2013; ISCAS 2012; iiSC-2011; ICCIS'2010; ICCCP'09; DTIS'08; ICCCP'07; ACIDCA-ICMI'2005; ICCCP'05; EUSIPCO 2004; WOCN'2004; ISCCSP04; ICM'04; JSF'03; GlobeCom 2003; ISSPA 2003; NSIP'2003; EUSIPCO-2002.

#### Selected Publications

- [1] Khriji, L. (2022). ECG pattern recognition technique for atrial fibrillation detection. *Revue d'Intelligence Artificielle*, Vol. 36, No. 2, pp. 215-222. <https://doi.org/10.18280/ria.360205>.
- [2] S. Bouaafia, S. Messaoud, A. Maraoui, A. Ammari, Lazhar Khriji, M. Machhout (2022), "Deep CNN-Based Hardware-Software Designing for Computer Vision Application on FPGA-SoC", *Journal of Computers and Electrical Engineering*, Elsevier. Volume 98, March 2022, 107671. <https://doi.org/10.1016/j.compeleceng.2021.107671>
- [3] S. Messaoud, S. Bouaafia, A. Maraoui, L. Khriji, A.C. Ammari, M. Machhout (2022), *Virtual Healthcare Center for Patient COVID-19 Detection based on Artificial Intelligence Approaches*, Hindawi, *Canadian Journal of Infectious Diseases and Medical Microbiology*, Volume 2022, <https://doi.org/10.1155/2022/6786203>
- [4] M. Fradi, L. Khriji, M. Machhout (2021), *Real-time arrhythmia heart disease detection system using CNN architecture based various optimizers networks*. Springer, *Multimedia Tools and Applications*. <https://doi.org/10.1007/s11042-021-11268-2>
- [5] M. Fradi, L. Khriji, M. Machhout, A.Y. Hossen (2021), Automatic heart disease class detection using convolutional neural network architecture-based various optimizers-networks. *IET Smart Cities* 3(1), 3-15, <https://doi.org/10.1049/smc2.12003>.
- [6] A. Hossen, L. Khriji, B. Al Ghunaimi, S. Al Barwani, D. Jaju (2020), *Wavelet Analysis for Early Identification of HRV Changes in Offspring with Genetic Predisposition to Hypertension in Oman*. *Journal of Technology and Health Care*, IOS Press, vol. 29, no. 5, pp. 869-879, 2021. DOI: [10.3233/THC-202469](https://doi.org/10.3233/THC-202469)
- [7] L. Khriji, A. Ammari, M. Awadalla (2020), *Hardware/Software Co-Design of a Vision System for Automatic Classification of Date Fruits*. IGI Global, *International Journal of Embedded and Real-Time Communication Systems*, *IJERTCS*: Volume 11, Issue 4 (050120-082715). DOI: [10.4018/IJERTCS.2020100102](https://doi.org/10.4018/IJERTCS.2020100102)
- [8] L. Khriji, A.C. Ammari, M. Awadalla, S. Al-Abri (2020), *Artificial Intelligent Techniques for Palm Date Varieties Classification*, *International Journal of Advanced Computer Science and Applications (IJACSA)*, Volume 11 No 9 September 2020. <https://dx.doi.org/10.14569/IJACSA.2020.0110958>