Curriculum Vitae

Dr. Yahia Fahem SAID

Electronic Engineering

Associate Professor

Department of Electrical Engineering

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PROFILE:

Dr. Yahia Said has acquired **Bachelor's Degree** in **Electronics** from the University of Monastir - Tunisia, the **Master's Degree** in **Microelectronics Systems** and the **PhD** in **Electronics** (Major: **Embedded Vision**) from the same University.

He worked as an **Assistant Professor** at the University of Monastir, Tunisia. He is currently an **Associate Professor** at the Electrical Engineering Department at the College of Engineering, Northern Border University, Arar, Saudi Arabia. He is a **Consultant** at the Deanship of Scientific Research, Northern Border University, Saudi Arabia.

Dr. Said has published several papers in top-ranked scientific journals and participated in many national and international conferences. He is an Editorial Board Member and regular reviewer of several well-known indexed journals. He is conducting research on STEM-related topics, such as intelligent embedded systems, artificial intelligence, embedded vision, assistance navigation of blind and visually impaired persons, COVID-19 prevention, intelligent traffic management systems in smart cities, advanced driver assistance systems, crowd management, desertification detection, and solar energy forecasting.

EDUCATION:

May 2021: Promotion to the rank of Associate Professor (May 2021) at Northern

Border University.

April 2016: Ph.D. in Electronics from the University of Monastir, Tunisia.

June 2010: Master's Degree in Microelectronics Systems from the University of

Monastir, Tunisia.

June 2008: Bachelor's Degree in Electronics from the University of Monastir, Tunisia.



EMPLOYMENT:

May 2021-up to now:	Associate Professor in Electronic Engineering at College of Engineering, Northern Border University, Arar, Saudi Arabia.
	Consultant – Deanship of Scientific Research, Northern Border University, Kingdom of Saudi Arabia
2018-April 2021:	Assistant Professor in Electronic Engineering at College of
	Engineering, Northern Border University, Arar, Saudi Arabia.
2016-2018:	Assistant Professor in Electronics and Microelectronics at Faculty of
	Sciences of Monastir, (FSM), University of Monastir, Tunisia.
2015-2016:	Lecturer in Electronics and Microelectronics at Faculty of Sciences of
	Monastir, (FSM), University of Monastir, Tunisia.
2013-2015:	Lecturer in Electronics and Microelectronics at Higher Institute of
	Industrial Systems of Gabes (ISSIG), University of Gabes, Tunisia.
2010-2013:	Lecturer in Electronics and Microelectronics at Higher Institute of
	Informatics and Mathematics of Monastir (ISIMM), University of
	Monastir, Tunisia.

PUBLICATIONS:

- **1. Yahia Said**, Ahmed A. Alsheikhy, Tawfeeq Shawly, and Husam Lahza. "Medical Images Segmentation for Lung Cancer Diagnosis Based on Deep Learning Architectures." *Diagnostics* 13, no. 3 (2023): 546. https://doi.org/10.3390/diagnostics13030546
- **2.** Al-Ali, Elham M., Yassine Hajji, **Yahia Said**, Manel Hleili, Amal M. Alanzi, Ali H. Laatar, and Mohamed Atri. "Solar Energy Production Forecasting Based on a Hybrid CNN-LSTM-Transformer Model." *Mathematics* 11, no. 3 (2023): 676. https://doi.org/10.3390/math11030676
- **3.** Lahza, Husam, Ahmed A. Alsheikhy, **Yahia Said**, and Tawfeeq Shawly. "A Deep Learning Approach to Predict Chronological Age." In *Healthcare*, vol. 11, no. 3, p. 448. Multidisciplinary Digital Publishing Institute, 2023. https://doi.org/10.3390/healthcare11030448
- **4. Yahia Said**, and Abdulaziz Alanazi. "AI-based solar energy forecasting for smart grid integration." *Neural Computing and Applications* (2022): 1-10. https://doi.org/10.1007/s00521-022-08160-x
- **5. Yahia Said**, Mohammad Barr, Taoufik Saidani, and Mohamed Atri. (2022). "Desertification Detection in Makkah Region based on Aerial Images Classification." *Computer Systems Science and Engineering*, 40(2), pp: 607–618, 2022. https://doi.org/10.32604/csse.2022.018479
- **6. Yahia Said**, and Riadh Ayachi. "Embedded Implementation of Social Distancing Detector Based on One Stage Convolutional Neural Network Detector." *Traitement du Signal* 39.3 (2022). https://doi.org/10.18280/ts.390318
- **7. Yahia Said**, and Mohammad Barr. "Human emotion recognition based on facial expressions via deep learning on high-resolution images." *Multimedia Tools and Applications*, *Springer*, pp. 1-13, 2021. https://doi.org/10.1007/s11042-021-10918-9
- **8. Yahia Said**, and Mohammad Barr. "Countries Flags Detection based on Local Context Network and Color Features." *Multimedia Tools and Applications*, *Springer*, pp. 1-13, 2021. https://doi.org/10.1007/s11042-021-10509-8
- **9.** Riad Alharbey, Ameen Banjar, **Yahia Said**, Mohamed Atri, Abdulrahman Alshdadi and Mohamed Abid, "Human Faces Detection and Tracking for Crowd Management in Hajj and Umrah." *Computers, Materials & Continua*, 71(3), pp: 6275–629, 2022. https://doi.org/10.32604/cmc.2022.024272
- **10.** Afif Mouna, Riadh Ayachi, **Yahia Said**. et al. "An efficient object detection system for indoor assistance navigation using deep learning techniques". *Multimedia Tools and Applications*, **Springer**, (2022). https://doi.org/10.1007/s11042-022-12577-w
- **11.** Afif Mouna, Riadh Ayachi, **Yahia Said**. et al. "An evaluation of EfficientDet for object detection used for indoor robots assistance navigation". *Journal of Real-Time Image Processing* (2022). https://doi.org/10.1007/s11554-022-01212-4
- **12.** Ayachi, Riadh, Mouna Afif, **Yahia Said**, and Abdessalem Ben Abdelali. "An edge implementation of a traffic sign detection system for Advanced driver Assistance Systems." *International Journal of Intelligent Robotics and Applications* (2022): 1-9. https://doi.org/10.1007/s41315-022-00232-4

- **13.** Ayachi, Riadh, Mouna Afif, **Yahia Said**, and Abdessalem Ben Abdelali. "Traffic Sign Detection for Green Smart Public Transportation Vehicles Based on Light Neural Network Model." In *Computational Intelligence Techniques for Green Smart Cities*, pp. 95-106. Springer, Cham, 2022. https://doi.org/10.1007/978-3-030-96429-0_4
- 14. Ayachi, Riadh, Mouna Afif, Yahia Said, and Abdessalem Ben Abdelali. "Traffic Sign Detection for Smart Public Transport Vehicles: Cascading Convolutional Autoencoder With Convolutional Neural Network." In Artificial Intelligence for Smart Cities and Villages: Advanced Technologies, Development, and Challenges, pp. 174-193. Bentham Science, 2022. https://doi.org/10.2174/9789815049251122010013
- Afif, Mouna, Riadh Ayachi, Yahia Said, and Mohamed Atri. "A Transfer Learning Approach for Indoor Object Identification." SN Computer Science 2, no. 6 (2021): 1-9. https://doi.org/10.1007/s42979-021-00790-7
- **16.** Ayachi, Riadh, Mouna Afif, **Yahia Said**, and Abdessalem Ben Abdelaali. "Real-time implementation of traffic signs detection and identification application on graphics processing units." *International Journal of Pattern Recognition and Artificial Intelligence* (2021). https://doi.org/10.1142/S0218001421500245
- **17.** Ayachi, Riadh, **Yahia Said**, and Abdessalem Ben Abdelali. "Optimizing Neural Networks for Efficient FPGA Implementation: A Survey." *Archives of Computational Methods in Engineering, Springer*, pp. 1-11, 2021. https://doi.org/10.1007/s11831-021-09530-9
- **18.** Ayachi, Riadh, Mouna Afif, **Yahia Said**, and Abdessalem Ben Abdelali. "Understanding Traffic Signs by an Intelligent Advanced Driving Assistance System for Smart Vehicles." *Journal of Artificial Intelligence and Big Data* 1, no. 1 (2021).
- **19.** Afif Mouna, Riadh Ayachi, **Yahia Said**, and Mohamed Atri, Deep learning-based application for indoor wayfinding assistance navigation, *Multimedia Tools and Applications*, 80, pp. 27115–27130, 2021. https://doi.org/10.1007/s11042-021-10999-6
- **20. Yahia Said.** "Pynq-YOLO-Net: An Embedded Quantized Convolutional Neural Network for Face Mask Detection in COVID-19 Pandemic Era". *International Journal of Advanced Computer Science and Applications* (*IJACSA*), Vol.11, No.9, pp.100-106, September 2020. https://doi.org/10.14569/IJACSA.2020.0110912
- **21. Yahia Said.** "Gender and Age Estimation at Distance in Smart Cities Surveillance: A cascaded Deep Learning-Based Approach". *IJCSNS International Journal of Computer Science and Network Security*, Vol.20, No.9, pp.9-15, September 2020. https://doi.org/10.22937/IJCSNS.2020.20.09.2
- **22.** Riadh Ayachi, **Yahia Said**, and Mohamed Atri. "A Convolutional Neural Network to Perform Object Detection and Identification in Visual Large-Scale Data." *Big Data*, Vol. 9, no. 1, pp. 41-52, 2021. https://doi.org/10.1089/big.2019.0093
- 23. Riadh Ayachi, Yahia Said, Abdessalem Ben Abdelaali. "Pedestrian Detection Based On Light-weighted Separable Convolution For Advanced Driver Assistance Systems". *Neural Processing Letters, Springer*, pp. 1-14, October 2020. https://doi.org/10.1007/s11063-020-10367-9
- **24.** Ahmed Alsheikhy, **Yahia Said**, and Mohammad Barr. "Logo Recognition with the Use of Deep Convolutional Neural Networks". *Engineering, Technology & Applied Science Research*, Vol. 10, No. 5, pp. 6191-6194, October 2020. https://doi.org/10.48084/etasr.3734
- **25.** Afif Mouna, Riadh Ayachi, Edwige Pissaloux, **Yahia Said**, and Mohamed Atri. "Indoor objects detection and recognition for an ICT mobility assistance of visually impaired people". *Multimedia Tools and Applications*, **Springer**, Vol. 79, pp. 31645–31662, August 2020. https://doi.org/10.1007/s11042-020-09662-3
- **26. Yahia Said**, Mohammad Barr, and Hossam Eddine Ahmed. "Design of a Face Recognition System based on Convolutional Neural Network (CNN)". *Engineering, Technology & Applied Science Research*, Vol. 10, No. 3, pp. 5608-5612, June 2020. https://doi.org/10.48084/etasr.3490
- **27.** Afif Mouna, **Yahia Said**, and Mohamed Atri. "Computer vision algorithms acceleration using graphic processors NVIDIA CUDA." *Cluster Computing*, **Springer**, pp. 1-13, March 2020. https://doi.org/10.1007/s10586-020-03090-6
- **28.** Afif Mouna, Riadh Ayachi, **Yahia Said**, and Mohamed Atri. "Deep Learning Based Application for Indoor Scene Recognition." *Neural Processing Letters*, *Springer*, pp. 2827–2837, March 2020. https://doi.org/10.1007/s11063-020-10231-w.
- **29.** Afif Mouna, Riadh Ayachi, **Yahia Said**, Edwige Pissaloux, and Mohamed Atri. "An Evaluation of RetinaNet on Indoor Object Detection for Blind and Visually Impaired Persons Assistance Navigation". *Neural Processing Letters*, **Springer**, pp. 2265–2279, January 2020. https://doi.org/10.1007/s11063-020-10197-9
- **30.** Afif, Mouna, Riadh Ayachi, **Yahia Said**, and Mohamed Atri. "Indoor sign Detection System for Indoor Assistance Navigation." In *2021 18th International Multi-Conference on Systems, Signals & Devices* (SSD), pp. 1383-1387. IEEE, 2021. https://doi.org/10.1109/SSD52085.2021.9429495

- **31.** Ayachi, Riadh, Mouna Afif, **Yahia Said**, and Abdessalem Ben Abdelali. "Drivers Fatigue Detection Using EfficientDet In Advanced Driver Assistance Systems." In *2021 18th International Multi-Conference on Systems*, *Signals & Devices (SSD)*, pp. 738-742. IEEE, 2021. https://doi.org/10.1109/SSD52085.2021.9429294
- **32.** Ayachi, Riadh, Mouna Afif, **Yahia Said**, and Abdessalem Ben Abdelali. "Traffic Sign Recognition Based On Scaled Convolutioal Neural Network For Advanced Driver Assistance System." In *2020 IEEE 4th International Conference on Image Processing, Applications and Systems (IPAS)*, pp. 149-154. IEEE, 2020. https://doi.org/10.1109/IPAS50080.2020.9334944
- **33.** Afif Mouna, **Yahia Said**, Edwige Pissaloux, & Mohammed Atri, (2020, September). "Recognizing signs and doors for Indoor Wayfinding for Blind and Visually Impaired Persons". In 2020 5th International Conference on Advanced Technologies for Signal and Image Processing (ATSIP) (pp. 1-4). **IEEE**. https://doi.org/10.1109/ATSIP49331.2020.9231933
- **34.** Riadh Ayachi, Afif Mouna, **Yahia Said**, & Abdessalam Abdelaali, (2020, September). "Pedestrian detection for advanced driving assisting system: a transfer learning approach". In 2020 5th International Conference on Advanced Technologies for Signal and Image Processing (ATSIP) (pp. 1-5). **IEEE**. https://doi.org/10.1109/ATSIP49331.2020.9231559
- **35.** Afif Mouna, Riadh Ayachi, **Yahia Said**, Edwige Pissaloux, and Mohamed Atri. "Indoor image recognition and classification via deep convolutional neural network". *Part of Smart Innovation, Systems and Technologies book series (SIST, volume 146), Springer*, pp. 364-371, 2019. https://doi.org/10.1007/978-3-030-21005-2 35
- **36.** Afif Mouna, Riadh Ayachi, **Yahia Said**, Edwige Pissaloux, Mohamed Atri. "Indoor Object Classification for Autonomous Navigation Assistance Based on Deep CNN Model". *Proceedings of the 5th IEEE International Symposium on Measurements & Networking (M&N 2019)*. pp. 1-4. **IEEE**, 2019. pp. 1-4. **IEEE**, 2019. https://doi.org/10.1109/IWMN.2019.8805042
- **37. Yahia Fahem Said** and Mohamed Barr. "Pedestrian Detection for Advanced Driver Assistance Systems using Deep Learning Algorithms". *IJCSNS International Journal of Computer Science and Network Security*, Vol.19, No.9, pp. 9-14, 2019. http://paper.ijcsns.org/07 https://paper.ijcsns.org/07 https://paper.ijcsns.o
- **38.** Ahmed Alsheikhy and **Yahia Fahem Said**. "Design of Embedded Vision System based on FPGA-SoC". *International Journal of Advanced Computer Science and Applications (IJACSA)*, Vol. 10, No. 10, pp. 91-98, October 2019. https://dx.doi.org/10.14569/IJACSA.2019.0101013