# **Curriculum Vitae**

### Dr. Yahia Fahem SAID

Electronics & Computer Engineering

#### **Associate Professor**

Department of Electrical Engineering, College of Engineering Northern Border University - Kingdom of Saudi Arabia **Phone:** +966 550226269 (Phone and Whatsapp) +216 50634930 (Phone)

Email: said.yahia1@gmail.com - yahia.said@nbu.edu.sa

Google scholar:	https://scholar.google.com/citations?user=dc3UZ6QAAAAJ
<b>Researchgate:</b>	https://www.researchgate.net/profile/Yahia Said
Scopus:	https://www.scopus.com/authid/detail.uri?authorId=53867137900
Orcid:	https://orcid.org/0000-0003-0613-4037

#### **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** 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 University of Monastir, Tunisia.
June 2010:	Master's Degree in Microelectronics Systems from University of Monastir, Tunisia.
June 2008:	Bachelor's Degree in Electronics from University of Monastir, Tunisia.

#### **EXPERIENCE:**

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, KSA
	Assistant Professor in Electronic Engineering at College of Engineering, Northern
2018-April 2021:	Border University, Arar, Saudi Arabia.
	Consultant – Deanship of Scientific Research, Northern Border University, KSA
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.



### **RESEARCH INTERESTS :**

- Intelligent Embedded Systems
- Embedded Vision
- Artificial Intelligence
- Big Data
- Deep Learning
- Object Detection and Recognition
- Indoor Assistance Navigation
- Intelligent Driving Assistance System
- Intelligent Traffic Management Systems in Smart Cities
- Embedded design and System-on-Chip (SoCs)
- Image and Video Processing
- Covid 19 prevention
- Crowd Management
- Reconfigurable architecture for real-time multimedia applications
- Solar Energy Forecasting
- Energy Management and Optimization

## **PUBLICATIONS:**

- Said, Yahia, Mohamed Atri, Marwan Ali Albahar, Ahmed Ben Atitallah, and Yazan Ahmad Alsariera. "Scene Recognition for Visually-Impaired People's Navigation Assistance Based on Vision Transformer with Dual Multiscale Attention." *Mathematics* 11, no. 5 (2023): 1127. <u>https://doi.org/10.3390/math11051127</u>
- Said, Yahia, Mohamed Atri, Marwan Ali Albahar, Ahmed Ben Atitallah, and Yazan Ahmad Alsariera. "Indoor Signs Detection for Visually Impaired People: Navigation Assistance Based on a Lightweight Anchor-Free Object Detector." *International Journal of Environmental Research and Public Health* 20, no. 6 (2023): 5011. <u>https://doi.org/10.3390/ijerph20065011</u>
- **3.** Atitallah, Ahmed Ben, **Yahia Said**, Mohamed Amin Ben Atitallah, Mohammed Albekairi, Khaled Kaaniche, Turki M. Alanazi, Sahbi Boubaker, and Mohamed Atri. "Embedded implementation of an obstacle detection system for blind and visually impaired persons' assistance navigation." *Computers and Electrical Engineering* 108 (2023): 108714. <u>https://doi.org/10.1016/j.compeleceng.2023.108714</u>
- 4. Said, Yahia, 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
- Alsheikhy, Ahmed A., Yahia Said, Tawfeeq Shawly, A. Khuzaim Alzahrani, and Husam Lahza. "A CAD System for Lung Cancer Detection Using Hybrid Deep Learning Techniques." *Diagnostics* 13, no. 6 (2023): 1174. <u>https://doi.org/10.3390/diagnostics13061174</u>
- Afif, Mouna, Riadh Ayachi, Yahia Said, and Mohamed Atri. "Deep learning-based technique for lesions segmentation in CT scan images for COVID-19 prediction." *Multimedia Tools and Applications* (2023): 1-15. <u>https://doi.org/10.1007/s11042-023-14941-w</u>
- Lahza, Husam, Ahmed A. Alsheikhy, Yahia Said, and Tawfeeq Shawly. "A Deep Learning Approach to Predict Chronological Age." *Healthcare*, vol. 11, no. 3, p. 448. MDPI, 2023. <u>https://doi.org/10.3390/healthcare11030448</u>
- 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. <u>https://doi.org/10.3390/math11030676</u>
- **9.** Alsheikhy, Ahmed, **Yahia F. Said**, Tawfeeq Shawly, and Husam Lahza. "A Model to Predict Heartbeat Rate Using Deep Learning Algorithms." *Healthcare*, vol. 11, no. 3, p. 330. MDPI, 2023. <u>https://doi.org/10.3390/healthcare11030330</u>
- 10. Ahmed Ben Atitallah, Mohamed Amin Ben Atitallah, Yahia Said, Mohammed Albekairi, Anis Boudabous, Turki M. Alanazi, Khaled Kaaniche, and Mohamed Atri. "An efficient text recognition system from complex color image for helping the visually impaired persons," *Computer Systems Science and Engineering*, vol. 46, no.1, pp. 701–717, 2023. <u>https://doi.org/10.32604/csse.2023.035871</u>
- Ahmed Alsheikhy, Yahia Said, and Tawfeeq Shawly. "An intelligent adaptive dynamic algorithm for a smart traffic system," *Computer Systems Science and Engineering*, vol. 46, no.1, pp. 1109–1126, 2023. <u>https://doi.org/10.32604/csse.2023.035135</u>
- 12. Ahmed Alsheikhy, Yahia Said, and Tawfeeq Shawly. "An intelligent decision support system for lung cancer diagnosis," *Computer Systems Science and Engineering*, vol. 46, no.1, pp. 799–817, 2023. https://doi.org/10.32604/csse.2023.035269

- **13.** Aymen Rhouma and **Yahia Said**, "Solar Energy Forecasting Based on Complex Valued Auto-encoder and Recurrent Neural Network" International Journal of Advanced Computer Science and Applications(IJACSA), 14(4), 2023. <u>http://dx.doi.org/10.14569/IJACSA.2023.0140443</u>
- 14. Afif, Mouna, Riadh Ayachi, Yahia Said, and Mohamed Atri. "A Transfer Learning Approach for Smart Home Application Based on Evolutionary Algorithms." In *Handbook of Research on AI Methods and Applications in Computer Engineering*, pp. 434-450. IGI Global, 2023. <u>https://doi.org/10.4018/978-1-6684-6937-8.ch020</u>
- **15.** Ayachi, Riadh, Mouna Afif, **Yahia Said**, and Abdessalem Ben Abdelali. "Lightweight Neural Networks for Pedestrian Detection in Intelligent Vehicles." In *Handbook of Research on AI Methods and Applications in Computer Engineering*, pp. 478-496. IGI Global, 2023. <u>https://doi.org/10.4018/978-1-6684-6937-8.ch022</u>
- **16. Said, Yahia**, and Abdulaziz Alanazi. "AI-based solar energy forecasting for smart grid integration." *Neural Computing and Applications* (2022): 1-10. <u>https://doi.org/10.1007/s00521-022-08160-x</u>
- 17. Said, Yahia, and Riadh Ayachi. "Embedded Implementation of Social Distancing Detector Based on One Stage Convolutional Neural Network Detector." *Traitement du Signal* 39, no. 3 (2022). <u>https://doi.org/10.18280/ts.390318</u>
- Alsheikhy, Ahmed A., Tawfeeq Shawly, Yahia F. Said, and Husam Lahza. "An Intelligent Smart Parking System Using Convolutional Neural Network." *Journal of Sensors* 2022 (2022). <u>https://doi.org/10.1155/2022/7571716</u>
- **19.** Alsheikhy, Ahmed A., **Yahia Said**, Tawfeeq Shawly, A. Khuzaim Alzahrani, and Husam Lahza. "Biomedical Diagnosis of Breast Cancer Using Deep Learning and Multiple Classifiers." *Diagnostics* 12, no. 11 (2022): 2863. <u>https://doi.org/10.3390/diagnostics12112863</u>
- 20. Shawly, Tawfeeq, Ahmed A. Alsheikhy, Yahia F. Said, and Husam Lahza. "An Effective Approach for Smart Parking Management." *Ingénierie des Systèmes d'Information* 27, no. 5 (2022). <u>https://doi.org/10.18280/isi.270511</u>
- **21.** Alsheikhy, Ahmed A., **Yahia F. Said**, and Tawfeeq Shawly. "Continuous Heartbeat Prediction Using a Face Recognition Algorithm." *Traitement du Signal* 39, no. 5 (2022): 1501-1506. https://doi.org/10.18280/ts.390506
- 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* 6, no. 2 (2022): 207-215. <u>https://doi.org/10.1007/s41315-022-00232-4</u>
- 23. 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. <u>https://doi.org/10.32604/csse.2022.018479</u>
- 24. 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). <u>https://doi.org/10.1007/s11042-022-12577-w</u>
- **25.** 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. <u>https://doi.org/10.32604/cmc.2022.024272</u>
- 26. Afif Mouna, Riadh Ayachi, Yahia Said. et al. "An evaluation of EfficientDet for object detection used for indoor robots assistance navigation". J Real-Time Image Proc (2022). https://doi.org/10.1007/s11554-022-01212-4
- 27. 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. <u>https://doi.org/10.1007/978-3-030-96429-0\_4</u>
- **28.** Ayachi, Riadh, Mouna Afif, **Yahia Said**, and Abdessalem Ben Abdelali. "An Embedded Implementation of a Traffic Light Detection System for Advanced Driver Assistance Systems." In *Industrial Transformation*, pp. 237-250. CRC Press, 2022. <u>https://doi.org/10.1201/9781003229018-13</u>
- 29. Ayachi, Riadh, Mouna Afif, Yahia Said, and Abdessalem Ben Abdelali. "Traffic Sign recognition for smart vehicles based on lightweight CNN implementation on mobile devices." In 2022 IEEE 9th International Conference on Sciences of Electronics, Technologies of Information and Telecommunications (SETIT), pp. 12-18. IEEE, 2022. https://doi.org/10.1109/SETIT54465.2022.9875912
- 30. 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. <u>https://doi.org/10.1007/s11042-021-10918-9</u>

- **31. 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
- **32.** 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. <u>https://doi.org/10.1007/s42979-021-00790-7</u>
- **33.** 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* (2021). <u>https://doi.org/10.31586/jaibd.2021.148</u>
- 34. 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). <u>https://doi.org/10.1142/S0218001421500245</u>
- **35.** 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. <u>https://doi.org/10.1007/s11831-021-09530-9</u>
- **36.** 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
- 37. 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. <u>https://doi.org/10.1109/SSD52085.2021.9429495</u>
- 38. 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
- **39. 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. http://doi.org/10.14569/IJACSA.2020.0110912
- **40.** 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. <u>http://doi.org/10.22937/IJCSNS.2020.20.09.2</u>
- 41. Riadh Ayachi, Yahia Said, Mohamed Atri. "A Convolutional Neural Network to Perform Object Detection and Identification in Visual Large-Scale Data". *Big Data*, October 2020. <u>http://doi.org/10.1089/big.2019.0093</u>
- 42. 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. <u>https://doi.org/10.1007/s11063-020-10367-9</u>
- **43.** 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. <u>https://doi.org/10.48084/etasr.3734</u>
- **44.** 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*, pp. 1-18, August 2020. <u>https://doi.org/10.1007/s11042-020-09662-3</u>
- **45.** 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. <u>https://doi.org/10.48084/etasr.3490</u>
- **46.** Afif Mouna, **Yahia Said**, and Mohamed Atri. "Computer vision algorithms acceleration using graphic processors NVIDIA CUDA." *Cluster Computing*, **Springer**, pp. 1-13, March 2020. <u>https://doi.org/10.1007/s10586-020-03090-6</u>
- 47. 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. <u>https://doi.org/10.1007/s11063-020-10231-w</u>.
- 48. 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. <u>https://doi.org/10.1007/s11063-020-10197-9</u>
- **49.** 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.

- 50. 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.* <u>https://doi.org/10.1007/978-3-030-21005-2\_35</u>
- 51. 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. <u>https://ieeexplore.ieee.org/document/8805042</u>
- **52.** 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. <u>http://paper.ijcsns.org/07\_book/201909/20190902.pdf</u>
- 53. 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. <u>https://dx.doi.org/10.14569/IJACSA.2019.0101013</u>
- 54. Riadh Ayachi, Afif Mouna, Yahia Said and Mohamed Atri. "Traffic Signs Detection for Real-World Application of an Advanced Driving Assisting System Using Deep Learning". *Neural Processing Letters*, Springer, pp. 837–851, September 2019. <u>https://doi.org/10.1007/s11063-019-10115-8</u>
- **55.** Riadh Ayachi, **Yahia ElFahem Said** and Mohamed Atri. "To Perform Road Signs Recognition for Autonomous Vehicles Using Cascaded Deep Learning Pipeline". *Artificial Intelligence Advances Journal*. Vol.1, No.1, pp. 1-10, 2019. <u>https://ojs.bilpublishing.com/index.php/aia/article/view/569/724</u>
- 56. Afif, Mouna, Riadh Ayachi, Yahia Said, Edwige Pissaloux, and Mohamed Atri. "A Novel Dataset for Intelligent Indoor Object Detection Systems." *Artificial Intelligence Advances Journal*. Vol.1, No.1, pp. 52-58, 2019. <u>https://ojs.bilpublishing.com/index.php/aia/article/view/925/778</u>
- 57. Riadh Ayachi, Afif, Mouna, Yahia Said, Mohamed Atri. "Strided convolution instead of max pooling for memory efficiency of convolutional neural networks". *Part of Smart Innovation, Systems and Technologies book series*, Springer, Cham, Vol.146, pp. 234-243, 2019. <u>https://doi.org/10.1007/978-3-030-21005-2\_23</u>
- 58. Taoufik Salem Saidani, Yahia Fahem Said. "Design of embedded architecture for pedestrian detection in image and video". *IJCSNS International Journal of Computer Science and Network Security*, Vol.17, No.12, pp. 120-129, December 2017. <u>http://paper.ijcsns.org/07\_book/201712/20171217.pdf</u>.
- 59. Yahia Said and Mohamed Atri. "Efficient and high-performance pedestrian detector implementation for intelligent vehicles". *IET Intelligent Transport Systems Journal (ISSN: 1751-956X), Vol. 10, Iss. 6, pp.* 438–444, (2016). <u>https://digital-library.theiet.org/content/journals/10.1049/iet-its.2015.0239</u>