

AHMED ABDELRAHMAN ABDALLA ALI
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• 0533924655

Assistant Professor of Computer Engineering

Innovative assistant professor focuses on embedded systems, and digital design. With over ten years of experience in teaching and mentoring students in a multi-cultural work environment.

ACHIEVEMENTS AND CORE COMPETENCIES

- Author of fifteen scientific papers, in machine learning and robotics, were published in reputed journals and international conferences. More than 54 citations with an h-index = 4 in Google Scholar.
- Supervised graduated thesis in robotic design with exceptional outputs, the titles of such of them are; Design and Implementation of a self-balancing robot. Designing and Implementation of PID Controller to Mentor Robot. Design and Implementation of Six Axes Robotic Arm Controller Using Arduino and LabVIEW. Design and Implementation of Robotic Arm Arduino Controller. Design and Implementation of a CNC Controller (Case study Two-Axes CNC Plasma Arc Cutting Machine). Design and Implementation of Effective LQR Controller for Self-Balancing Robot.
- Supervised digital control graduated projects; Enhancement of DC Motor Speed Using Fuzzy Controller. Design and Implementation of remote control of DC motorized vehicle. Implementation of a PID Control System on Microcontroller (Dc Motor Case Study). Design and Simulation of DC Motor Speed Controller using Pole Placement Technique and MATLAB.
- Experienced in teaching high-level languages, for example, C and C++ for embedded systems and robotics, Python and Python libraries such as Pandas, Scikit learn,
- Using hardware-software co-design tools during lectures and projects designing, simulation, and testing: XILINX FPGA, ISE, and Vivado. 8/16/32 bits microcontrollers: ARM processor, Intel 8051, and PIC. Write programs in assembly and C, using MPLAB X professional IDE.
- Experienced with online training and teaching technologies, for example, Blackboard, ZOOM, Kahoot, Nearpod, Camtasia 9, and Google Meet.

PROFESSIONAL EXPERIENCE

- Assistant Professor of Computer engineering
Al Fayha private college, Saudi Arabia Sep 2022 -Present
Computer Science and Engineering Program coordinator
- Assistant Professor of Computer engineering
Ministry of Higher Education and Scientific Research, Sudan Jan 2010 – 2021
Joint full-time and part-time top-ranked universities in Sudan, the University of Khartoum, Karary University, and BAYAN College of Science and Technology.
 - Engaged in electrical and computer engineering department and college of engineering committees.
 - Teaching different courses related to computer and information technology, beginning from preliminary semesters to final ones, for students of both genders for bachelor's, master's, and Ph.D. programs.
 - Teaching overseas students of both genders that are non-Arabic speakers. Courses such as fundamental and advanced programming, algorithms and data structures, software

engineering, machine learning, microprocessor and assembly language, digital design, and embedded systems.

- Supervising graduate projects with achievable results.

EDUCATION

- World Education Services, Canada June 2021
Verified International Academic Qualifications
- Vladimir State University, Russian Federation. Sep 2007 - Jan 2010.
Philosophy of Doctor in computer systems and information technology
- Vladimir State University, Russian Federation. Sep 2003 - June 2006.
Master of Science in computer engineering and information technology
- Karary University, Republic of Sudan. May 1995 - Jan 2000.
Bachelor of Science (Honor) in computer engineering and systems.

PROFESSIONAL DEVELOPMENT

- Attended the Riscure User Workshop, Amsterdam the Netherlands, 13–14 Sep. 2018.
- Attended the tutorial “Counterfeit Integrated Circuits: Threats, Detection, and Avoidance”, Domenic J. Forte (University of Florida) and Rajat Subhra Chakraborty (Indian Institute of Technology, Kharagpur), Amsterdam the Netherlands, 9 Sep. 2018.
- Attended the 20th Conference on Cryptographic Hardware and Embedded Systems, International Association for Cryptologic Research, Amsterdam the Netherlands, 2018
- Attended the tutorial “Post-Quantum Cryptography for Embedded Systems”, Tim Güneysu, Taipei-Taiwan, 25 Sep. 2017.
- Attended the 19th Conference on Cryptographic Hardware and Embedded Systems, International Association for Cryptologic Research, Taipei-Taiwan, 2017
- Attended the IEEE International Conference on Communication, Control, Computing, and Electronics Engineering 2017, Sudan.
- Attended the 10th International Computing Conference in Arabic 2016, Sudan.
- Attended International Conference on Computing, Control, Networking, Electronics and Embedded Systems Engineering 2015, Sudan.
- Attended the IEEE 17th International Conference on Computational Science and Engineering 2014, China.
- Attended the International Conference on Computing Electrical and Electronics Engineering 2013, Sudan