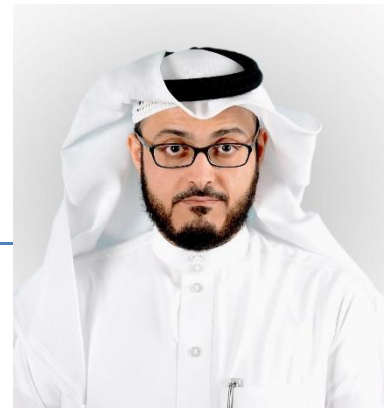


Dr. Muhannad Almutiry, Ph.D.

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Education – degree, discipline, institution, year

1. Doctor of Philosophy - Ph.D. in Electrical Engineering, University of Dayton, Ohio, USA Jan 2013- Aug 2016
2. Master of Science - M.S. in Electrical Engineering, University of Dayton, Ohio USA May 2009- Dec 2010
3. Bachelor of Science - B.S. in Electrical Engineering, Umm Al-Qura University, Makkah Sept 2002 - June 2007

Ph.D. Advisor

Dr. Michael C. Wicks, Chief Scientist, Sensors Directorate, Air Force Research Laboratory, Professor at University of Dayton.
<http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/105121/dr-michael-c-wicks.aspx>

Academic experience

1. Alasalah Colleges, Board of trustees member, May 2023 - present
2. Associate Professor- May 2021 to present
3. Dean of Admission and Registration- Mar 2021 to present
4. Head of Remote Sensing Research Unit, Northern Border University, Saudi Arabia – March 2020 to present.
Provide technical, analytical, and numerical support for ongoing research and development projects in mathematics, statistics, electrical engineering, and signal processing. Derive, implement, and evaluate signal- and data-processing algorithms related to radar remote sensing. Contribute technical expertise to symposium, journal articles, and technical reports. Prepare and deliver reports or presentations of research projects/analysis results to project sponsors as appropriate. Contribute to the generation of proposals and external funding. Apply safety-related knowledge, skills, and practices to everyday work.
5. Assistant Vice Rector for Academic Affairs, Northern Border University, Saudi Arabia – Aug 2019 to Aug 2022.

Responsibilities

- Lead the University transformation from Knowledge-Base Teaching to Competency-Base Teaching.
- Directing the academic affairs of the University.
- Assist the Rector in developing and supervising the implementation of academic policies and strategies in order to fulfill the University's missions.
- Co-ordinate all academic activities at local, national and international levels that contribute to the University's strategic academic direction;

- Oversee the academic activities of the faculties, as well as other independent academic units, including both the appointment of academic staff and the oversight of those aspects of the University's assurance systems designed to underpin and guarantee the high quality of the University's teaching and research.
6. Vice Dean for Academic Affairs, Northern Border University, Saudi Arabia – Nov 2016 to Oct 2018.

Responsibilities:

Provides leadership for the development and implementation, and continuous quality improvement of an innovative curriculum through ABET accreditation policies and procedures. Ensures academic and student affairs compliance with the University policy and procedures. Coordinates with Academic Coordinators, the faculty, and the academic and student affairs staff to ensure quality, continuity innovation, and integrity in academic and student issues.

Academic Position

1. Associate Professor, Electrical Engineering Department, Northern Border University, Saudi Arabia – May 2021 to Present
2. Assistant Professor, Electrical Engineering Department, Northern Border University, Saudi Arabia – Oct 2016 to May 2021.
3. Researcher, Mumma Radar Lab, University of Dayton, June 2013 to Aug 2016
4. Visiting lecturer for advanced Radar topics, Prince Sultan Advanced Tech. Research Institute (PSATRI), Dec 2015.
5. Teaching assistant, for introduction to Radar, Microwave and RF measurements, and Electronics Warfare (EW) at University of Dayton.

Start up Experience

- 1- Co-founder – SARSAT Arabia – Start up Company – Funded by King Abdullah for Science and Technology University. From September 2020 to Present.**

SARsat Arabia is a space startup in the GCC and Arabia that designs and develops small satellites to do Earth Observation (EO) using Synthetic Aperture Radar and provide data for many sectors to support decision makers. SARsat is a spin-off of TAQADAM Startup Accelerator, incubated and funded by King Abdullah University of Science and Technology (KAUST), and supported officially by UAE Space Agency.

- 2- Radio Frequency Engineer – Saudi Mobile Telecommunication Company (Zain) company, Sep 2007 to Mar 2008.**

Research Focus areas

Acoustic UAV detection, Artificial Intelligence, Radar imaging, Internet of Radar things, Remote sensing, RF tomography, Electronics Warfare, Detection and Estimation, Radar Tracking, Synthetic Aperture Radar, and Space-Time Adaptive Radar.

Committee:

Chairman of the Standing Executive Committee for High Impact Educational Practices
 Chairman of the High Impact Educational Practices strategic planning committee
 Member of The University strategic planning 2020-2025 committee

Member of The Standing Committee for Academic Plans and Programs
Chairman of Executive Committee of reconstructing NBU Colleges and Programs.
Chairman of The Standing Committee for the Coop Training.
Chairman of The Exit Exam Committee.
Member of the Determine the Core Competencies of NBU Students.

Current membership in professional organizations

IEEE - The Institute of Electrical and Electronics Engineers.

Activities

Founder and vice president of Saudi Students Association at University of Dayton 2009.

Community Service:

- Manage and coordinate the University initiative to the community “Our Summer full of Skills صيفنا مهارات” at Summer 2019.
- Provide the following Training to the community:
 - o “How to Program the Mobile App using Flutter Programming Language” 5 days
 - o “Introduction to Artificial Intelligence and 5G Communication” 5 Days
 - o “Design A Home Solar Cell System” 3 Days
 - o “ Radio Frequency and Communications Systems” 1 Day

Funded Research

- The principle investigator, (SAR 192000) “A Novel Mining Approach using Ground Penetrating Radar Tomography Mounted on Intelligent Unmanned Aerial Vehicles” Funded by the Deputyship for Research & Innovation, Ministry of Education in Saudi Arabia for funding this research work through the project number ‘-6864 2020 IF “
- Co-investigator, (SAR 35000) “Performance Evaluation in a Radar System”, Funded By the Deanship of Scientific Research, Northern Border University.
- The principle investigator, (SAR 45000) “A Novel Method for Pattern Recognition based on Radar Tomographic Images”, Funded By the Deanship of Scientific Research, Northern Border University.
- The principle investigator, (SAR 20000) “Pre-processing of data and post-processing of images in CBCT reconstruction”, Funded By the Deanship of Scientific Research, Northern Border University.
- The principle investigator, (SAR 14000) “Adaptive Locally Most Powerful Test for Radar Tomography Deconvolution Noise”, Funded By the Deanship of Scientific Research, Northern Border University.
- The principle investigator, (SAR 84000) “Diffusion of Undergraduate Research for Implementing High Impact Educational Practices”, Funded By the Rectorate of Development, Quality and Community Service, Northern Border University.
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Publication and Patent

- 1- **Muhannad Almutiry**, U. S. Patent “Systems and method for reconstructing 3d radio frequency tomographic images” patent status Granted, US 10 , 204 , 428 B2
<https://patentimages.storage.googleapis.com/d7/e4/00/5144191162e34b/US10204428.pdf>
- 2- **Muhannad Almutiry**, "Wideband Tomographic Super-Resolution Radar Image," in IEEE Sensors Journal, vol. 20, no. 3, pp. 1208-1216, 1 Feb.1, 2020, doi: 10.1109/JSEN.2019.2946491. (**Impact factor: 3.076**)
- 3- A Waqas, N Saeed, H Mahmood, M Almutiry “Distributed Destination Search Routing for 5G and beyond Networks” Sensors 22 (2), 472
- 4- Sharief Abdel-Razeq, Hazim Shakhathreh, Ali Alenezi, Ahmad Sawalmeh, Muhammad Anan, Muhannad Almutiry “PSO-Based UAV Deployment and Dynamic Power Allocation for UAV-Enabled Uplink NOMA Network” Publication date 2021/8/1 Journal Wireless Communications and Mobile Computing Volume 2021 Publisher Hindawi
- 5- Muhannad Almutiry, Ahmed Alsheikhy, “A Novel Method for Pattern Recognition based on Radar Tomographic Images” International Journal of Computer Science & Network Security(IJCSNS), Nov 2021
- 6- Ahmed Alsheikhy, Muhannad Almutiry, “Response Time Estimation in Robotics Using Hierarchical Performance Modeling Approach” Advances in Science and Technology Research Journal 2021, 15(4), 14–20 <https://doi.org/10.12913/22998624/142655>, ISSN 2299-8624, License CC-BY 4.0
- 7- Hazim Shakhathreh, Ali Alenezi, Ahmad Sawalmeh, Muhannad Almutiry, Waed Malkawi “Efficient Placement of an Aerial Relay Drone for Throughput Maximization” Publication date 2021/6/8 Journal Wireless Communications and Mobile Computing Volume 2021 Publisher Hindawi
- 8- Khan, J.B.; Jan, T.; Khalil, R.A.; Saeed, N.; Almutiry, M. An Efficient Multistage Approach for Blind Source Separation of Noisy Convolutional Speech Mixture. Appl. Sci. 2021, 11, 5968. <https://doi.org/10.3390/app11135968>
- 9- "Modeling Ground-to-Air Path Loss for Millimeter Wave UAV Networks" H Shakhathreh, W Malkawi, A Sawalmeh, M Almutiry, A Alenezi arXiv preprint arXiv:2101.12024
- 10- Efficient Placement of an Aerial Relay Drone for Throughput Maximization H Shakhathreh, A Alenezi, A Sawalmeh, M Almutiry, W Malkawi. Wireless Communications and Mobile Computing 2021, Volume 2021 |Article ID 5589605 | <https://doi.org/10.1155/2021/5589605>
- 11- Muhannad Almutiry, Mohammad Y. Alshehri, M. Gary Sayed “Diffusion of High Impact Educational Practices at a Saudi University” Athens Journal of Education,
- 12- **Muhannad Almutiry**, “UAV TOMOGRAPHIC SYNTHETIC APERTURE RADAR FOR LANDMINE DETECTION” Engineering, Technology & Applied Science Research Vol. 10, NO. 5, Aug 2020.
- 13- Hazim Shakhathreh, Waed Malkawi, Ahmad Sawalmeh, **Muhannad Almutiry**, Ali Alenezi “MODELING GROUND-TO-AIR PATH LOSS FOR MILLIMETER WAVE UAV NETWORKS”, Journal of Green Engineering. Vol 10, Issue 1, January 2021
- 14- **Muhannad Almutiry**, “Detection of Buried Object Using RF Tomography Under High-Order Born Approximation Assumption” Journal Of The North For Basic And Applied Sciences , Vol 6, Issue 1, Nov 2021.
- 15- **Muhannad Almutiry**, “Internet of Radar things for Cognitive Robotics” International Journal of ADVANCED AND APPLIED SCIENCES, Vol. 7, NO. 11, Nov 2020.

- 16- Ahmed Alsheikhy, **Muhannad Almutiry** "Performance Evaluation in a Radar System" IJCSNS International Journal of Computer Science and Network Security, VOL.18 No.11, November 2018.
- 17- Ezzeddine Touti, Ali Sghaier Tlili, **Muhannad Almutiry** "Dynamic output feedback control for nonlinear large-scale interconnected systems" COMPEL - The international journal for computation and mathematics in electrical and electronic engineering, Vol. ahead-of-print No. ahead-of-print. <https://www.emerald.com/insight/0332-1649.htm>
<https://doi.org/10.1108/COMPEL-10-2019-0427> (**Impact factor: 0.590**)
- 18- Muhannad Almutiry, "Tomographic Synthetic Aperture Radar for Landmine Detection", THE 5TH INTERNATIONAL CONFERENCE FOR ELECTRONIC WARFARE & RADAR TECHNOLOGY 12 - 13 DECEMBER 2017, RIYADH, SAUDI ARABIA
- 19- Muhannad Almutiry, Lorenzo Lo Monte, and Michael C. Wicks, "Extraction of Weak Scatterer Features Based on Multipath Exploitation in Radar Imagery," International Journal of Antennas and Propagation, vol. 2017, Article ID 5847872, 13 pages, 2017. doi:10.1155/2017/5847872 (**Impact factor: 1.207**)
- 20- M. Almutiry, A. Nassib, Y. Guzel, L. Lo Monte, M. C. Wicks "Extraction of weak target features from radar tomographic imagery" IEEE National Aerospace & Electronics Conference & Ohio Innovation Summit, NAECON-OIS 2015, Dayton, OH
- 21- M. Almutiry, M. C. Wicks, T. Negishi, D. Erricolo, L. Lo Monte, "Exploitation of Dominant Scatterers for Sidelobe Suppression in Radar Tomography," Signal Processing Symposium, Debe, Poland, June 10-12, 2015.
- 22- Y. Guzel, M. Almutiry, A. Nassib, L. Lo Monte, M. C. Wicks "A Fast Matched Filter Approach for Below Ground Imaging" IEEE National Aerospace & Electronics Conference & Ohio Innovation Summit NAECON-OIS 2015, Dayton, OH
- 23- A. Nassib, M. Almutiry, Y. Guzel, L. Lo Monte, M. C. Wicks "FEKO Based ISAR Analysis for 3D Object Reconstruction " IEEE National Aerospace & Electronics Conference & Ohio Innovation Summit NAECON-OIS 2015, Dayton, OH
- 24- Y. Guzel, M. Almutiry, L. Lo Monte, A. Nassib, M. A. Saville, M. C. Wicks "Spectral and Spatial Diversity Measurements in the Mumma Radar Lab," in IEEE Int.Radar Conf., Arlington, VA, 2015
- 25- Nihad Al-Faisali, Nicholas Hopkins, Mansour Aljohani, Junjun Huan , Muhannad Almutiry, Krupakar Reddy Samala, Alex Burwell, Daniel Wetzel, Michael C. Wicks "On the Use of Circular SAR to Improve the Performance of Knowledge-Aided STAP " IEEE National Aerospace & Electronics Conference & Ohio Innovation Summit, NAECON-OIS 2016, Dayton, OH, 25-29 July 2016. DOI: 10.1109/NAECON.2016.7856830, Electronic ISSN: 2379-2027