C.V.

Name: Anas Abdulrahim Mohamed Bushnag
Date of Birth: 6-10-1983
Nationality: Saudi Arabian
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Languages: Arabic (Mother Tongue)
English (Excellent)

Career Objective

An accomplished academic and administrator seeking to further contribute to excellence in teaching, research, and institutional leadership within the field of Computer Engineering and Computer Science. Committed to advancing innovative research, fostering student success, and supporting academic development initiatives in alignment with international standards.

Professional Profile

Currently serving as an **Associate Professor** in the **Computer Engineering Department** and **Vice Dean for Educational Affairs** at the **Faculty of Computers and Information Technology, University of Tabuk**. Earned a **Ph.D. in Computer Science and Engineering** in 2017. I am a motivated and goal-oriented professional with strong interpersonal and organizational skills, demonstrating excellent communication abilities and adaptability. I possess a proven capacity to quickly learn, adopt, and apply emerging technologies and methodologies within dynamic academic environments.

Research Interests

- Networking
- Robotics
- Computer Vision
- Machine Learning
- Parallel and Distributed Systems
- Internet of Things (IoT)

Education

2000 to 2005 - Arab Academy for Science Technology and Maritime Transport
Alexandria Egypt
Level Achieved: Bachelor's Degree in Computer Engineering.
Graduation Project: Virtual University (Online University).
Project's Grade: Excellent.

2009 to 2010 – University of Hertfordshire Hatfield United Kingdom
Level Achieved: Master's Degree in Computer Science.
Pathway: Computer Networking Principles and Practice.
Thesis Title: Performance Evaluation of Multicast and Unicast Networks Using Different Protocols.
Overall Grade: Distinction (Excellent).

2013 to 2017 – University of Bridgeport Bridgeport United States
Level Achieved: Master's Degree in Computer Science and Engineering.
Overall Grade: Excellent.

2013 to 2017 – University of Bridgeport Bridgeport United States
Level Achieved: Ph.D. Degree in Computer Science and Engineering.
Dissertation Title: Optimizing Source Anonymity of Wireless Sensor Networks against Global Adversary using Fake Packet Injections.
Overall Grade: Excellent.

Work Experience - Lecturer 2011-2017 - Assistant Professor 2018-2023 - Associate Professor 2023- current - Vice Dean of Development and Quality, Faculty of Computers and Information Technology 2019 - 2020 - Vice Dean, Faculty of Computers and Information Technology 2018 - current	**Date** **2011-current**	**University of Tabuk** Saudi Arabia
Work Experience **Role:** - Citizen Affairs. - Visas Affairs. - Network Support (Testing and troubleshooting network problems). - Network Infrastructure upgrading projects. - Network cabling Infrastructure. - Printers (troubleshooting).	**Date** **2005-2008**	**Company:** **Royal Consulate General of Saudi Arabia in Alexandria** Egypt
Courses taught by me: - Computer Skills - Microsoft Office - Programming - Robotics - Applied Cryptography - Network security - Research Methods - Computational Mathematics	**Date** **2018-current**	**University of Tabuk** Saudi Arabia
Courses taught by me: - Database.	**Date** **2015-2016**	**University of Bridgeport** USA
Courses taught by me: - Programming 1 (basics of C#) - Programming 2 (Advanced C#) - Introduction to Computers - Microsoft Office	**Date** **2011-2012**	**University of Tabuk** Saudi Arabia
Network Courses - Managing a Microsoft windows server 2003 Environment. - Maintaining a MS Win Server Environment. - Implementing & Supporting Microsoft Windows XP Professional. - Implementing a MS Win server 2003 Network Infrastructure-Network Hosts.	**2005-2006**	**New Horizons** Alexandria, Egypt
Hardware Course - A+ Core Hardware**.**	**2006-2006**	**Comptia** Alexandria, Egypt
Academic English Courses	**2008-2009**	**HIBT** Hatfield, United Kingdom

General English Course - First Certificate level	**2009-2009**	**Edwards Language School** London, United Kingdom
Network+ Course	**2009-2009**	**London School of Computer Education** London, United Kingdom
Training - Control Systems. - PC Troubleshooting.	**2004-2004**	**Arab Petroleum Pipelines Co. "SUMED"** Sidi Krare, Egypt

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My Skills

Skill	Level
Network administration using windows server	Expert
Network administration using Linux	Expert
NS-2 Network Simulator	Expert
programming languages (Java, VB, C#)	Expert
Arduino	Expert
Database	Expert
Wireless Sensor Networks	Expert
Machine Learning	Expert
Microsoft Office	Expert
Latex	Expert
Designing websites using Web 2.0	Expert
visual studio.net	Expert
ASP.NET	Expert
Architecture Design	Expert
MAC OS	Expert
Matlab	Expert
IOS Programming	Intermediate
Photoshop	Intermediate

My Publications

- **An auto-validation method for a complete IoT pivot irrigation model based on the Penman–Monteith equation, 2026.**

  Scientific Reports

- **Development of Surveillance Robots Based on Face Recognition Using High-Order Statistical Features and Evidence Theory, 2026.**

  Journal of Imaging

- **An Innovative Finite Impulse Response Filter Design Using a Combination of L1/L2 Regularization to Improve Sparsity and Smoothness, 2025.**

  Electronics

- **Smart agriculture: IoT-Based smart irrigation with advanced fuzzy logic control, 2025.**

  Expert Systems with Applications

- **Smart Farming: Leveraging a Deep Learning Model for Plant Leaf Classification, 2025.**

  The World Congress Conference in Computer Science, Computer Engineering, & Applied Computing, USA

- **Enhancing Cloud Security: A Study on Ensemble Learning-Based Intrusion Detection Systems, 2024.**

  IET Communications

- **Constraint Optimization Model for Dynamic Parking Space Allocation, 2024.**

  Sensors

- **AI-based Intrusion Detection for Secure Internet of Things (IoT), 2024.**

  Journal of Network and Systems Management

- **Association between Obesity and COVID-19: Insights from Social Media Content, 2023.**

  Information

- **A SLAM-Based Localization and Navigation System for Social Robots The Pepper Robot Case, 2023.**

  Machines

- **A Systematic Approach for Exploring Underground Environment Using LiDAR-Based System, 2023.**

  Computer Modeling in Engineering & Sciences

- **Iris Recognition Based on Multilevel Thresholding Technique and Modified Fuzzy c-Means Algorithm, 2022.**

Journal on Artificial Intelligence

- **A Robust Face Recognition Model against Morphing Attacks using CNN, 2022.**

  Journal of Computer Engineering

- **Color Edge Detection Using Multidirectional Sobel Filter and Fuzzy Fusion, 2022.**

  Computers, Materials & Continua

- **An Improved Air Quality and Climate Control Monitoring System Using Fuzzy Logic for Enclosed Areas, 2022.**

  Journal of Ambient Intelligence and Humanized Computing

- **A Wireless ECG Monitoring and Analysis System Using the IoT Cloud, 2022.**

  Intelligent Automation & Soft Computing

- **An Intrusion Detection System Model in a Local Area Network using Different Machine Learning Classifiers, 2021.**

  The 11th International Conference on Advanced Computer Information Technologies (ACIT), Germany.

- **Air Quality and Climate Control Arduino Monitoring System using Fuzzy Logic for Indoor Environments, 2020.**

  The International Conference on Control, Automation and Diagnosis (ICCAD'20): Paris, France.

- **Investigating the Use of Pipelined LU Decomposition to Solve Systems of Linear Equations, 2020.**

  International Conference on Computing and Information Technology (iccit-1441): Tabuk, Saudi Arabia.

- **Anonymity against Global Adversary in WSNs Using Dummy Packet Injections: A Survey, 2018.**

  Electronics journal 7(10) with impact factor of 2.110.

- **An Efficient Source Anonymity Technique based on Exponential Distribution against a Global Adversary Model using Fake Injections, 2017.**

  Proceedings of the 13th ACM Symposium on QoS and Security for Wireless and Mobile Networks: Miami, USA.

- **A Specialized Event-Driven Network Simulator for Security and Anonymity Applications of Wireless Sensor Networks, 2017.**

  The 7th IEEE Annual Computing and Communication Workshop and Conference: Las Vegas, USA

- **Source Anonymity in WSNs against Global Adversary Utilizing Low Transmission Rates with Delay Constraints, 2016.**

  Sensors journal 16(7) with impact factor of 2.677.

- **Source Anonymity in WSNs Against Global Adversary based on Low Rate Fake Injections, 2016.**

  IEEE International Conference on Wireless Information Technology and Systems (ICWITS): Honolulu, Hawaii.

- **Directed Diffusion based on weighted Grover's Quantum Algorithm (DWGQ), 2015.**

  Conference: IEEE Long Island Systems, Applications and Technology LISAT2015: Long Island, NY.

- **Performance Evaluation of Unicacst Networks Using Different Queuing Protocols, 2014.**

  Conference Name: ASEE Annual Conference and Exposition Final Program and Proceedings: Bridgeport, USA.

- **TERP: A Trusted and Energy Efficient Routing Protocol for Wireless Sensor Networks (WSNs), 2013.**

  Conference Name: The 17th IEEE/ACM International Symposium on Distributed Simulation and Real Time Applications Volume: Delft, Netherlands.

Certificates available upon request.