

PERSONAL PROFILE	Lecturer in Computer Science with a PhD from a UK university and over 15 years of university teaching experience. Strong background in databases, software engineering, algorithms, and machine learning. Experienced in curriculum development, student supervision, and publishing in IEEE and Springer venues. Committed to high-quality teaching and research excellence in an international academic environment.	
OBJECTIVE	Contribute as a Senior Lecturer / Lecturer in Computer Science through high-quality teaching, curriculum development, student supervision, and applied research, particularly in Software Engineering, Databases, Algorithms, and Machine Learning.	
RESEARCH INTERESTS	Machine learning and applied artificial intelligence, data analytics and signal processing, algorithmic and theoretical foundations of intelligent systems, and software engineering methodologies.	
EDUCATION	Ph.D. in Computer Science and Informatics, University of Huddersfield, 2020, research area: using machine learning for detecting and diagnosing defects of electric machines. MSc. in Business Information System, The Libyan Academy, Tripoli, Libya, 2011. Research scope: a proposal of information system for tasks increasing the quality of the information in the management. BSc. in Data Analysis and Computer, University of Aljabil Elgarbi, Gharyan, Libya, 1999. Final Year project: developing software for calculating and tracking vehicle insurance.	
PROFESSIONAL DEVELOPMENT	Teaching Assistant Preparation Programme (TAPP) <i>University of Huddersfield, United Kingdom</i> Instructional Design: Developing clear lesson frameworks and learning activities for students. Classroom Management: Leading both small-group tutorials and large-scale lectures effectively. Assessment and Feedback: Designing exams and quizzes while providing clear guidance for student improvement. Inclusive Teaching: Adapting teaching methods to support students with disabilities and diverse learning needs.	
LANGUAGES	Arabic Native. English Fluent / Full professional proficiency.	
WORK EXPERIENCE	Lecturer of Computer Science University of Zintan August 2022 – Present • Delivered and assessed undergraduate modules in Computer Science, including: – Introduction to Computer Science. – Introduction to Algorithms. – Databases. – Software Engineering. – Application Software. – Programming Languages. – Computer Systems. • Supervised undergraduate final-year projects. • Contributed to curriculum development and quality assurance activities.	

Administrative Specialist at Cleardata Company in UK

November.2021–June.2022

Main roles: Preparation of documents, Data entry, Quality checking scanned images, Opening and sorting incoming mail.

Exam Invigilator at University of Huddersfield

May.2017–Aug.2019

Exam Invigilator at the University of Liverpool

Jul.2014–May.2016

Lecturer Assistant at the University of Aljabil Elgarbi

Jul.2011-May.2013

Main roles: Teaching Introduction to Computer science, Introduction to Algorithm, and Application Software.

IT support officer Social Solidarity branch - Gharyan (part time)

Feb.2006-Aug.2010

Main roles: Installing and configuring computer hardware, software. Monitoring and maintaining computer systems and networks. Also, database management including Data extraction, Transformation, and Loading. Database backup and recovery.

Teaching Assistant at the University of Aljabil Elgarbi

Mar.2003-June.2011

Main roles: Teaching assistant and Demonstrator for the following modules: Introduction to Programming, Operating System Concepts, Foundation of Computer Science.

TECHNICAL SKILLS

- **Programming Languages:** Proficient in C++, Java, PHP, Visual Basic, and MATLAB (primary tool during PhD research), with foundational knowledge of modern programming paradigms.
- **Machine Learning and AI:** Hands-on experience with Machine Learning algorithms, including Support Vector Machines (SVM) and Decision Trees (DT), with research experience in machine learning applications.
- **Optimization Algorithms:** Strong knowledge and experience in applying optimization algorithms, including Genetic Algorithms (GA), to problem-solving and optimization tasks.
- **Software Engineering:** Knowledge of software development methodologies, software lifecycle management, and application software development.
- **Databases:** experience with database management systems and SQL.
- **Security and Privacy:** Understanding of cybersecurity principles and secure system design.
- **Theoretical Computer Science:** Knowledge of computational theory, algorithms, and complexity analysis.
- **Software and Data Tools:** Proficient in Microsoft Office, LyX, LaTeX, and SPSS.

PUBLICATIONS

1. **Samir. Alabied**, Osama Hamomd, Alsadak Daraz, Fengshou Gu, and Andrew D. Ball. Fault diagnosis of centrifugal pumps based on the intrinsic time-scale decomposition of motor current signals. In *2017 23rd IEEE International Conference on Automation and Computing (ICAC)*, pages 1-6, Huddersfield Sep.2017.
2. **Samir. Alabied**, U. Haba, A. Daraz, Fengshou Gu, and Andrew D. Ball. Empirical mode decomposition of motor current signatures for centrifugal pump diagnostics. In *2018 24th IEEE International Conference on Automation and Computing (ICAC)*, pages 1-6, Newcastle Upon Tyne Sep.2018.

3. **Samir. Alabied**, Alsadak Daraz, Khalid Rabeyee, I. Fengshou Gu, and Andrew D. Ball. Motor Current Signal Analysis Based on Machine Learning for Centrifugal Pump Fault Diagnosis. In *2019 25th IEEE International Conference on Automation and Computing (ICAC)*, pages 1-7, Lancaster Sep.2019.
Hamomd, Osama, Samir Alabied, Yuandong Xu, Alsadak Daraz, Fengshou Gu, and Andrew Ball.
4. **Samir, Alabied**. "Enhancement of Condition Monitoring Information from the Control Data of Electrical Motors Based on Machine Learning Techniques." PhD diss., University of Huddersfield, 2020.
5. Osama Hamomd, **Samir Alabied**, Y Xu, Asadak Daraz, Fengshou Gu, and Andrew D. Ball. "Vibration based centrifugal pump fault diagnosis based on modulation signal bispectrum analysis." In *2017 23rd International Conference on Automation and Computing (ICAC)*, pages. 1-5. IEEE, 2017.
6. Daraz, Alsadak, **Samir Alabied**, Ann Smith, Fengshou Gu, and Andrew D. Ball. "Detection and diagnosis of centrifugal pump bearing faults based on the envelope analysis of airborne sound signals." In *2018 24th International Conference on Automation and Computing (ICAC)*, pp. 1-6. IEEE, 2018.
7. Daraz, Alsadak, **Samir Alabied**, Dong Zhen, Fengshou Gu, and Andrew D. Ball. "Detection and diagnosis of mechanical seal faults in centrifugal pumps based on acoustic measurement." In *Advances in Asset Management and Condition Monitoring: COMADEM 2019*, pp. 963-975. Springer International Publishing, 2020.
8. Haba, Usama, Khaldoun Brethee, **Samir Alabied**, Debanjan Mondal, Fengshou Gu, and Andrew Ball. "Modelling and simulation of a two stage reciprocating compressor for condition monitoring based on motor current signature analysis." *Condition Monitoring and Diagnostic Engineering Management* 2 (2018).
9. Daraz, Alsadak, **Samir Alabied**, Fengshou Gu, and Andrew D. Ball. "Modulation signal bispectrum analysis of acoustic signals for the impeller wear detection of centrifugal pumps." In *2019 25th International Conference on Automation and Computing (ICAC)*, pp. 1-6. IEEE, 2019.
10. Daraz, Alsadak, **Samir Alabied**, Fengshou Gu, and Andrew D. Ball. "A comparative study of acoustic and vibration signals for bearing fault detection and diagnosis based on MSB analysis." In *International Conference on Maintenance Engineering*, pp. 854-868. Cham: Springer International Publishing, 2020.
11. Alashter, Aisha, Yunpeng Cao, Khalid Rabeyee, **Samir Alabied**, Fengshou Gu, and Andrew D. Ball. "Bond graph modelling for condition monitoring of induction motors." In *Advances in Asset Management and Condition Monitoring: COMADEM 2019*, pp. 511-523. Springer International Publishing, 2020.
12. Rabeyee, Khalid, Yuandong Xu, **Samir Alabied**, Fengshou Gu, and Andrew Ball. "Extraction of Information from Vibration Data using Double Density Discrete Wavelet Analysis for Condition Monitoring." (2019).