



# Dr. Abdullah M. Alshanqiti

Vice Dean of the Faculty of Computer and Information Systems  
Lecturer in (and the head of) the Department of Computer Science

 PhD 2017    MSc 2011    BSc 2005

July 2020

## ACADEMIC QUALIFICATIONS

### • The University of Leicester, Leicester, UK — (PhD)

MARS 2012 - APRIL 2017

Doctorate Degree (PhD) in intelligent and dynamic reverse engineering. Thesis Title: Inferring Visual Contracts from Java Applications. As part of the PhD project, I've developed a smart prototype tool, using Java, for extracting and generalising visual contracts from existing Java applications. These contracts are formalised by Graph Transformation Theory.

### • The University of Leicester, Leicester, UK — (MSc)

JANUARY 2010 - JULY 2011

Master of Science (MSc) in Web Applications and Services, graduated with distinction  
Thesis Title: Test Coverage in Model-Based Development of Web Service Process.

### • Taibah University, Madinah, KSA — (BSc)

APRIL 2000 - FEBRUARY 2005, Bachelor's Degree (BSc) in Computer Science

## PUBLICATIONS

- Abdullah Alshanqiti and Abdallah Namoun. "A Hybrid Model for Predicting Influential Factors Associated with Student Performance and Learning Outcomes." *Journal - IEEE Access* (2020) to be appeared.
- Abdallah Namoun, Abdullah Alshanqiti, Ezzat Chamudi, and Ayman Rahmoun "Web Design Scraping: Enabling Factors, Opportunities and Research Directions" (2020) *12th International Conference on Information Technology and Electrical Engineering (ICITEE)* to be appeared.
- Abdullah Alshanqiti, Ayman Bajnaid, Shuaa Aljasir, Aeshah Alsughayyir. "Intelligent Parallel Mixed Method Approach for Characterising Viral YouTube Videos in Saudi Arabia". *Int. J. Adv. Comput. Sci. Appl.*(2020).
- Abdullah Alshanqiti, Safi Faizullahy, Sarwan Ali, Maria Khalid Alvi, Muhammad Asad Khanx, Imdadullah Khan. "Detecting DDoS Attack on SDN Due to Vulnerabilities in OpenFlow". *IEEE International Conference on Advances in the Emerging Computing Technologies* (2019).
- Abdullah Alshanqiti, Reiko Heckel, and Timo Kehr. "Inferring visual contracts from Java programs." In *Automated Software Engineering, an International Journal* Springer Science+Business Media, LLC, part of Springer Nature 2018.
- Timo Kehr, Abdullah M. Alshanqiti, Reiko Heckel. "Automatic Inference of Rule-Based Specifications of Complex In-place Model Transformations" In *International Conference on Theory and Practice of Model Transformations, Lecture Notes in Computer Science*, vol 10374. Springer, Cham ICMT, 2017: 92-107
- Abdullah Alshanqiti, Reiko Heckel, and Timo Kehr. "Visual Contract Extractor: A Tool for Reverse Engineering Visual Contracts using Dynamic Analysis." In *Automated Software Engineering (ASE) 31th IEEE/ACM International Conference on IEEE*, 2016.
- Alshanqiti, Abdullah, and Reiko Heckel. "Extracting Visual Contracts from Java Programs (T)." In *Automated Software Engineering (ASE), 2015 30th IEEE/ACM International Conference on*, pp. 104-114. IEEE, 2015.
- Alshanqiti, Abdullah M., and Reiko Heckel. "Towards Dynamic Reverse Engineering Visual Contracts from Java." *Electronic Communications of the EASST* 67 (2014).
- Abdullah M. Alshanqiti, Reiko Heckel, Tamim Ahmed Khan. "Learning Minimal and Maximal Rules from Observations of Graph Transformations" *Electronic Communications of the EASST ECEASST* 58 (2013).

## TITLES OF ONGOING RESEARCH PROJECTS

- Arabic Text Summarization using Deep Sequential Pattern Learning: An Extractive Approach.
- A funded Research Project: An intelligent decision support system for identifying weaknesses in the attainment of student learning outcomes in higher education.
- A funded Research Project: Mining and Inferring Sentiment from Arabic Texts.
- A funded Research Project: An analytical approach using text mining to understand the causes of intellectual distractions that are related to terrorist behaviours through social media networking platforms.

## REFERENCES

### Prof. Reiko Heckel

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www.cs.le.ac.uk/people/rh122/

### Dr. Ayman Bajnaid

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## PAST & CURRENT TEACHING ACTIVITIES

- Artificial Intelligence, *Islamic University (currently)*, 1<sup>st</sup> & 2<sup>nd</sup> Semesters 2019-2020.
- System Analysis and Design, *Islamic University*, 1<sup>st</sup> & 2<sup>nd</sup> Semesters 2018-2019.
- Artificial Intelligence, *Islamic University*, 1<sup>st</sup> & 2<sup>nd</sup> Semesters 2018-2019.
- Data Structures (Java), *University of Leicester* in 2017, 1<sup>st</sup> Semester.
- Java Programming and Database, *University of Leicester* in 2017, 1<sup>st</sup> Semester.
- Service-Oriented Architectures, *University of Leicester* from 2013 to 2015
- System Reengineering, *University of Leicester* in 2013, 2<sup>nd</sup> Semester.
- Introduction to Computer Science, *Taibah University* in 2005, 1<sup>st</sup> Semester.
- Programming 1, *Taibah University* in 2005, 1<sup>st</sup> Semester.
- Data Structures 1 (C++), *Taibah University* in 2005, 1<sup>st</sup> Semester.
- Computer Graphics (C++), *Taibah University* in 2005, 1<sup>st</sup> Semester.

## INTERESTS

- Machine Learning, mainly in Deep Neural Networks.
- Text mining and Sentiment Analysis.
- Quantum Machine Learning Computing.
- Automatic generation of test cases using visual contracts.
- Scheduling HPC-applications in cloud environments.
- Model Extraction using Dynamic Reverse Engineering Analysis.
- Model-driven Developments.

## AWARDS AND CERTIFICATES

- Two Certificates of Excellence for PhD research, given by the Cultural Attaché in the United Kingdom in 2015 & 2016.
- Certificate of Excellence for MSc research, given by the Cultural Attaché in the United Kingdom in 2011.