



Resume of **Emsaieb Geepalla**

Address: Gerah, Ashati, Libya

Mobile: 00218916402715

Fax: 00218715121019

E-mail: Dean@feng.sebhau.edu.ly

Ems.geepalla@sebhau.edu.ly

Current status

Dean of Engineering Science and Technology Faculty,
Assistant Professor at School of Electrical and Computer Engineering,
Faculty of Engineering Science and Technology, Sebha University,
Brak Ashati,
Libya

Personal Details

Date of Birth : 28 June 1978.
Place of Birth : Brak, Libya
Nationality : Libyan
Residential Address : Gerah, Ashati, Libya

Education

- **PhD in Computer Science, 2013**
Affiliation : School of Computer Science, University of Birmingham, Birmingham, UK.
Principal supervisor : Dr. Behzad Bordbar
Thesis Title : Model Driven Approaches to Analyze Time and Location Dependent Access Control Specification
- **M.Sc. in Information and Communication Technology, 2007.**
Affiliation : School of Information Technology, University Utara Malaysia (UUM)
GPA: : 3.55/4.0
- **B.Sc in Communication Engineering, 2002**
Affiliation : School of Electrical and Computer Engineering Sebha University, Brak, Ashati. Libya
Grade : GPA: 68.37.

Job Experiences

- **Sep 2015 – Till Date, Dean of Faculty**
Place of job: Faculty of Engineering Science and Technology, Sebha University, Brak Ashati, Libya.
- **Dec 2016 – Till Date, Assistant Professor**
Place of job: School of Electrical and Computer Engineering,

- Faculty of Engineering Science and Technology,
Sebha University,
Brak Ashati, Libya.
- **Dec 2013 – Nov 2016, Lecturer**
Place of job: School of Electrical and Computer Engineering,
Faculty of Engineering Science and Technology,
Sebha University,
Brak Ashati, Libya.
 - **Apr 2016 – Apr 2017 Part Time, Researcher**
Place of job: Research and Development office, Almadar Aljdid,
Libya.
 - **Nov 2014 – Sep 2015, Head of School**
Place of job: School of Electrical and Computer Engineering,
Faculty of Engineering Science and Technology,
Sebha University,
Brak Ashati, Libya.
 - **June 2013-Nov 2013, Postdoctoral Research Fellow**
Place of job : British Telecom Research Centre and University of Birmingham
Birmingham, UK.
 - **Apr 2009-Nov 2013, Research staff member**
Place of job : School of Computer Science, University of Birmingham
Birmingham, UK.
 - **Aug 2007-Feb 2009, Assistant Lecturer**
Place of job : School of Electrical and Computer Engineering,
Faculty of Engineering Science and Technology,
Sebha University,
Brak Ashati, Libya.
 - **Sep 2002-Dec 2005, Teacher**
Place of job : Algouds Secondary School,
Gerah Ashati, Libya.

Awards and Recognition

- Received, in Jan 2008, a scholarship from the Libyan Ministry of Higher Education to pursue PhD study in The United Kingdom.
- Received postdoctoral fellowship awards from British Telecom during the period of June and Nov 2013.
- Received, in Apr 2016 research grant from Almadar Aljdid Company.
- Appointed as Head of Electrical and Computer Engineering at Faculty of Engineering Science and Technology, Sebha University, Nov 2014.
- Appointed as Dean of Faculty of Engineering Science and Technology, at Sebha University, Sep 2015.

Professional Expertise

Programming languages: C/C++, Java, SQL/OQL, Cypher Query Language , Alloy, Petri Nets, JavaScript

Operating systems: Windows 9x/NT/XP (with excellent knowledge of Win32 API), Unix (Linux and Solaris) with reasonable knowledge of Unix APIs

Technologies: ATL, XML, Databases, Graph-Database, UML, Neo4j, Timed Automata, Hadoop, SiTra, Ac2Alloy, AC2Automata, AC2Neo4j

Methodologies: Model-driven engineering (MDE), Rational Unified Process, Personal Software Process, Team Software Process

Teaching Experience

- **Taught the following modules:**
 - ❖ Object Oriented Programming
 - ❖ Computer Networks
 - ❖ Introduction to Database
 - ❖ Graph Database
 - ❖ Information Security
 - ❖ Software Engineering
 - ❖ Software Development
 - ❖ Compilers

Journal Publications

- [1] Emsaieb Geepalla and Behzad Bordbar. "An Automated Approach to Detect Inconsistency and Semi-consistency Spatio-Temporal Role Based Access Control Specification." *Journal of Data Processing* Volume 2, no. 3 (2012).
- [2] Emsaieb Geepalla, Nassir Abuhamoud. "Using Spatio-Temporal Role Based Access Control for Physical Access Control Specification: Towards Effective Cyber-Physical Systems." *The International Journal of Innovative Science and Modern Engineering™ (IJISME)*. Volume-3 Issue 7, June 2015.
- [3] Nassir Abuhamoud, Emsaieb Geepalla. "Methods of Compensation Instability of Frequency Modulators in the Absence of the Modulation Signal". *The International Journal of Engineering Science (IJES)*. Volume 4, Issue 6, Pages PP.58-62, June - 2015

Conferences Publications

- [4] Emsaieb Geepalla, Behzad Bordbar, and Joel Last. "Transformation of spatio-temporal role based access control specification to alloy." In *Model and Data Engineering*, pp. 67-78. *Lecture Notes in Computer Science*, Springer, 2012.
- [5] Emsaieb Geepalla and Behzad Bordbar. "On formalizing of Inconsistency and Semi-consistency in Spatio-Temporal Access Control." In the *Seventh IEEE International Conference on Information Management (ICDIM)*, page 22-29. IEEE 2012.
- [6] Emsaieb Geepalla, Behzad Bordbar, and Kozo Okano. "Verification of Spatio-Temporal Role Based Access Control using Timed Automata." In *Networked Embedded Systems for Every Application (NESEA)*, 2012 IEEE 3rd International Conference on, pp. 1-6. IEEE, 2012.
- [7] Emsaieb Geepalla and Nassir Abuhamoud. "Verification of Time and Location Dependent Access Control Specification." In the *2nd World Symposium On Computer Network and Information Security 2015*. IEEE 2015.
- [8] Emsaieb Geepalla, Behzad Bordbar, Kozo Okano and Seyedhamed Seyedali. "AC2Uppaal: A Tool for automatic Generation of Timed Automata form Spatio-Temporal Role Based Access Control Specifications." In the *Proceeding of World Congress of Internet Security (WorldCIS) 2013*. IEEE, 2013.

- [9] Emsaieb Geepalla, Behzad Bordbar, and Xiaofeng Du. "Spatio-Temporal Role Based Access Control for Physical Access Control Systems." In the Fourth International Conference on Emerging Security Technologies (EST) 2013. IEEE, 2013.
- [10] Emsaieb Geepalla. "Comparison between Alloy and Timed Automata for modelling and analysing of access control specifications," Third International Conference on Cyber Security, Cyber Warfare and Digital Forensic (CyberSec), 2014, vol., no., pp.16,21. IEEE 2014.
- [11] Emsaieb Geepalla. "Model-Driven Approaches to Analysing Time- and Location-Dependent Access Control Specifications." PhD Thesis, University of Birmingham, 2013.
- [12] Nassir Abuhamoud, Emsaieb Geepalla. "Using Ad Hoc-network with IEEE802.11 ac: Possibilities and Challenges," The First Scientific Symposium Of Electrical And Electronic Engineering (EEES) 2016.
- [13] Emsaieb Geepalla, Nassir Abuhamoud and Abdulla Abuda. "Analysis of Call Detail Records for Understanding Users Behavior and Anomaly Detection Using Neo4j". Submitted for 5th International Symposium on Data Mining Applications (SDMA 2018).
- [14] Nassir Abuhamoud and Emsaieb Geepalla. "Using Neo4j For Fraud Detection In Banks Sector". Submitted to The Libyan International Conference on Electrical Engineering and Technology (LICEET 2018).
- [15] Nassir Abuhamoud and Emsaieb Geepalla. "Analysis of Call Detail Records using Neo4j for Crime Investigation". Submitted for 5th International Symposium on Data Mining Applications (SDMA 2018).

Research Interest

My research interests broadly cover Cyber Physical Access Control, Formal Methods, and Model-Driven Architecture. I am also interested in studying, understanding, and modelling large-scale data. My more specific themes of research include:

- Modelling and Verification Access Control
Modelling and Analysis of Cyber Physical Systems
- Formalizing Anomaly Problems for Complex Data
- Anomaly detection in large complex Data
- Big Data Analytics

Research Grants

Graph-Based Method for Anomaly Detection in Physical Access Control, period June 2013 – Nov 2013, (14000\$), British Telecom (BT) grant.

Analysis of Mobile Network Database Using Neo4j: Almadar Aljdid Case Study, period April 2016 – Feb 2017, (30000\$), Almadar Aljdid grant.

Software Development

- Designed and developed the AC2Alloy tool – An Eclipse plug-in, 2011
- Designed and developed the AC2Uppaal tool – An Eclipse plug-in, 2012
- Designed and developed a website of AC2Alloy and AC2Uppaal tools, 2013.
<http://www.cs.bham.ac.uk/~bxb/accesscontrol/>
- Designed and developed the AC2Neo4j tool – An Eclipse plug-in, 2017
- Designed and developed the CDR2Neo4j Tool, 2017

Affiliation with Professional Body

- Member of the technical committee of the International Conference on Big Data and Smart Computing (ICBDSC 2018) Morocco.
- The Chairman of the organizing committee of the first postgraduate student at Sebha University, 2017.
- Member of the organizing committee of the First International Conference on Science and Technology at Sebha University, 2018.
- Review Committee Member for the First International Conference on Science and Technology at Sebha University, 2018.
- Review Committee Member for the first postgraduate student at Sebha University, 2017.
- Member of the jury team for Almadar Aljdid competition, 2017.
- Member, IEEE.
- Member, EATCS (European Association for Theoretical Computer Science)
- Member, SCTA (Computer Science Teachers Association),

References

Name	Position	Email
❖ Prof. Rasim Alsanbani	Vice Dean of Engineering Science and Technology	V.dean@feng.sebhau.edu.LY
❖ Behzad Bordbar	Lecturer at School of Computer Science, University of Birmingham, UK	B.Bordbar@cs.bham.ac.uk
❖ Fatehi Alwafie	Head of Electrical and Computer Engineering School	Fat.Alwafie@Sebhau.Edu.LY Ee.dept@feng.sebhau.edu.LY