



Faculty of Computers and
Information – Minia University

CURRICULUM VITAE TA. Mina Samman Younan



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Personal:

Date of Birth: 04/09/1988
Marital Status: Single
Nationality: Egyptian
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Military status: I did the military service

Education

Degree	University	Date	Degree
• PhD Qualifying	Cairo University, Egypt	2017	Passed
• M.Sc. (Computer Science)	Cairo University, Egypt	2016	89%
• B.Sc. (<i>Computer Science</i>)	Minia University, Egypt	2009	84.6%

Field of Specialization:

- **General Specialty:** Computer Science
- **Accurate Specialty:** Distributed Systems / Internet of Things (IoT).

Current Position:

- Teaching Assistant in Department of Computer Science, Faculty of Computers and Information, Minia University.
- Ph.D. Student in Department of Computer Science, Faculty of computers and Information, Minia University.

Professional Experience

Title/Rank	Institution	From	To
• Assistant Lecturer	Computer Science Department, Minia University, Egypt	2016	Until Now
• Demonstrator	Computer Science Department, Minia University, Egypt	2011	2016

Master Thesis

Title: A Framework for Searching in the Web of Things

Abstract:

The main contribution of the Master thesis is to propose a Web of Things Search Framework (WoTSF), which addresses the WoT search challenges while focusing on crawling and indexing WoT data streams. The main idea of the proposed WoTSF is to keep indices as up-to-date as possible by building and maintaining scalable high-level indices, while keeping the maintenance of local indices at the Local WoT Search Engines (LWoTSEs) of IoT networks. This two-layer architecture delegates the handling of the huge sensory data (potentially in different formats) to the local search engines (lower layer), while keeping compact global indices at the top layer. An experimental evaluation of the WoTSF against the state-of-the-art Dyser WoT search engine concludes that the WoTSF keeps high-level indices up-to-date and could be used on top of Dyser to save time consumed for crawling, indexing and searching processes.

The second contribution of the thesis is to design, implement and experimentally evaluate an integrated testbed for the WoT. Although simulators, like Cooja, and Web sites, like Thingspeak, give the ability to build simple IoT and WoT applications, they are not compatible with realistic testing in WoT. Getting real datasets that cover the main features of WoT is one of the most important factors in WoT testing and research. So building a testbed environment for the WoT that allows generating datasets and using them offline and online is a part of this thesis contribution. This testbed was used to implement the local search engine, which is the basic layer in the architecture of the proposed (WoTSF) whereby the global indices are built on top of this layer. The main components and detailed design of the testbed are described. We also present an evaluation of the WoT testbed by empirically measuring the accuracy of the generated dataset and by qualitatively comparing the testbed to the state-of-the-art in WoT and IoT measurement platforms.

Research interests and new trends

1. Embedded Systems
2. Wireless Sensor Network
3. Internet of Things
4. Web of things
5. Search Esngines
6. Cloud Computing
7. Security
8. Data Mining
9. Semantic meaning
10. Swarm Optimization Algorithms

PhD Preliminary Courses (Current Study)

- | | |
|--------------------------|----------------------------------------------------------------|
| 1. Soft Computing | 3. Software Engineering |
| 2. Information Retrieval | 4. Advanced Topics in Computer Systems and Parallel Processing |

PhD Qualifying Courses

- | | |
|------------------------------------------|---------------|
| 1. An Introduction to Theory of Computer | 2. Algorithms |
|------------------------------------------|---------------|

Courses studied in Pre-Master

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|--------------------------------|----------------------------|
| 1. Theory of Computer | 4. Parallel Computing |
| 2. Algorithms | 5. Cryptography |
| 3. Research Methods and Skills | 6. Wireless Sensor Network |

Courses Taught

- | | |
|-----------------------------------------------------------|-----------------------------------|
| 1. Software Engineering | 8. Logic Programming |
| 2. Object-Oriented Programming | 9. Algorithms |
| 3. Data Structures and Algorithms | 10. Database Management Systems |
| 4. Fundamentals of Computer Science | 11. Formal Languages and Automata |
| 5. Programming Languages (C++, C#, Arduino, and Netduino) | 12. Artificial Intelligence |
| 6. Theory of computation | 13. File Organization |
| 7. Systems Analysis and Design | 14. Security |

Soft Skills

- | | |
|------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| 1. Interactive and fast enough to learn new technologies and sciences. | 5. Self motivated. |
| 2. Ability to work under pressure. | 6. Ability to work in a group or individually according to the job requirements. |
| 3. Good communication skills. | |
| 4. Good research abilities. | |

Language

- | |
|-------------------------------------------------------|
| 1. Arabic: Native Language |
| 2. English: Very Good (reading, writing and speaking) |

Publications

Papers Published in Journals:

1. M. Younan, S. Khattab, and R. Bahgat, "**Evaluation of An Integrated Testbed Environment for the Web of Things**", in IntSys15v8n34 : International Journal On Advances in Intelligent Systems, v 8 n 3&4, December, 2015.

Papers Published in Conference Proceedings:

1. M. Younan, S. Khattab, and R. Bahgat, "**An Integrated Testbed Environment for the Web of Things**," in ICNS 2015 : The Eleventh International Conference on Networking and Services, ISBN: 978-1-61208-404-6, Rome, Italy, May, 2015, pp. 69-78.
2. M. Younan, S. Khattab, and R. Bahgat, "**A Framework for Searching in the Web of Things**," in INFOS 2016 : The 10th International Conference on Informatics and Systems, ACM, Egypt, Cairo, May, 2016.

Papers Published as a Book Chapter:

1. M. Younan, S. Khattab, and R. Bahgat, "**A WoT Testbed for Research and Course Projects**", in *Managing the Web of Things: Linking the Real World to the Web*, M. Kaufmann, Elsevier, October - 2016.

Papers Under submission

1. M. Younan, S. Khattab, and R. Bahgat, "**A historical overview for the Web of Things (WoT)**"