

Abdullah Ibrahim Salama

asalama@h-eng.helwan.edu.eg

LinkedIn: <https://www.linkedin.com/in/aisalama/>

(+20) 114 90 80 763

Cairo, Egypt

OBJECTIVE

Out the box thinking Software Engineer and Research Assistant with expertise in Java, Python, C++ and C# and proven integration problem-solving tenure of 3 years. Have been a primary RA and key player in multiple funded applied research projects. Skilled in developing systems architecture, writing requirements specifications and user documentation training manuals.

EDUCATION

Faculty of Engineering, Helwan University, Egypt

Bachelor of Science in Computer and Software Engineering

May, 2019

Overall Grade: Excellent with Honors

Rank: 1st, Overall Percentage: 93.35%

GP: Mobile Data Offloading in Integrated Cellular and Wi-Fi Networks

Grade: Excellent

INTERESTED IN

Cloud Computing, Big Data, Optimization, Wireless Communications, Data Mining, Artificial Intelligence (AI), Internet of Things (IoT), Smart Grids

PUBLICATIONS

M. M. Elmesalawy, A. Atia, A. M. F. Yousef, A. M. Abd El-Haleem, M. G. Anany, N. A. Elmosilhy, **A. I. Salama**, A. Hamdy, H. M. El Zoghby, and E. S. El Din, “**AI-based Flexible Online Laboratory Learning System for Post-COVID-19 Era: Requirements and Design**,” in *International Mobile, Intelligent, and Ubiquitous Computing Conference (MIUCC), IEEE, 2021*. DOI: 10.1109/MIUCC52538.2021.9447601

M. M. Elmesalawy, **A. I. Salama** and M. G. Anany, “**Tracy: Smartphone-based Contact Tracing Solution that Supports Self-investigation to Limit the Spread of COVID-19**,” in *2nd NILES; Novel Intelligent and Leading Emerging Sciences Conference, IEEE, 2020*. DOI: 10.1109/NILES50944.2020.9257915

A. I. Salama and M. M. Elmesalawy, “**Flexible and Adaptive Testbed for 5G Experimentations**,” in *NILES; Novel Intelligent and Leading Emerging Sciences Conference, IEEE, 2019*. DOI: 10.1109/NILES.2019.8909341

A. I. Salama and M. M. Elmesalawy, “**Experimental OAI-based Testbed for Evaluating The Impact of Different Functional Splits on C-RAN Performance**,” in *NILES; Novel Intelligent and Leading Emerging Sciences Conference, IEEE, 2019*. DOI: 10.1109/NILES.2019.8909310

APPLIED RESEARCH PROJECTS

“**IoT Enabled Geofencing System for Monitoring and Imposing COVID-19 Control Measures in Workplaces, Service Areas and Distributed Home Quarantine**,” *STIFA Funded Research Project*

“**Online Laboratory Learning Environment for Engineering, Science and Technology Education**,” *ASRT Funded Research Project*

“**Free Space Optical Communication with a Quantum Light**,” *STIFA Funded Research Project*

“**Integrating 3G/4G and Wi-Fi Architectures for Diverse Offloading Capabilities**,” *NTRA Funded Research Project*

“**Heterogeneous C-RAN Architecture Based on Hybrid FSO/mmW Fronthaul Transport Network for 5G Mobile Systems**,” *NTRA Funded Research Project*

ORGANIZED EVENTS

“Helwan University Hackathon: Together Against COVID-19 (HU-HTAC),” STIFA Funded Project
URL: <https://htac.helwan.edu.eg/>

DEVELOPED SOLUTIONS

“Tracy solution,” *Tracy is a smartphone-based contact tracing solution that supports self-investigation to limit the spread of COVID-19.*
URL: <https://wrl.helwan.edu.eg/solutions/tracy/> (Arabic version)

“iOffload solution,” *iOffload is an intelligent mobile data offloading solution that enables mobile operators to optimize the use of cellular and WiFi networks to improve user experience and generate new revenue streams and business cases.*
URL: <https://wrl.helwan.edu.eg/solutions/ioffload/>

“OpenAirInterface (OAI) Remote Control Manager (RCM) platform,” *OAI-RCM is an innovative management platform which is designed and developed to enable remote and centralized configuration, operation and management of any OAI node in a flexible and adaptive way.*
URL: <https://wrl.helwan.edu.eg/solutions/oai-rcm-platform/>

IMPLEMENTED TESTBEDS

“OAI-based 4G LTE testbed”
URL: <https://wrl.helwan.edu.eg/testbeds/oai-lte/>

“OAI-based C-RAN testbed”
URL: <https://wrl.helwan.edu.eg/testbeds/c-ran/>

“WiFi Seamless Authentication testbed”
URL: <https://wrl.helwan.edu.eg/testbeds/wifi-seamless-auth/>

“Access Network Discovery and Selection Function (ANDSF) testbed”
URL: <https://wrl.helwan.edu.eg/testbeds/andsf/>

“RAN Level-Based LTE/WiFi Aggregation testbed”
URL: <https://wrl.helwan.edu.eg/testbeds/lte-wifi-aggregation/>

“Measurements Collection and Monitoring Tool (MCMT) testbed”
URL: <https://wrl.helwan.edu.eg/testbeds/mcmt/>

“Multi-user Transmit Beamforming testbed”
URL: <https://wrl.helwan.edu.eg/testbeds/multi-user-transmit-beamforming/>

WORKING EXPERIENCE

Teaching Assistant at Department of Computer and Systems Engineering, Faculty of Engineering, HU	May 2021 - Present
System Architect / Research Assistant at Wireless Research Lab (WRL), Helwan University	Aug 2018 - Present
Research Assistant at Wireless Intelligent Networks Center (WINC), Nile University	Dec 2020 - Present
Mathematics Teacher at Darisni	Jul - Sep 2017
Full Stack Web Developer at D&D Solutions	Jul - Sep 2016
Book Reviewer at Supervisor Educational Books	Jul - Oct 2014

TECHNICAL SKILLS

Languages: Java, Python, TypeScript, C, C++, C#, JavaScript, PHP
Frameworks: Angular(TypeScript), Spring Boot(Java), Django(Python), Laravel(PHP), WordPress(PHP), Bootstrap
Scripting Languages: Bash, HTML, CSS

Tools: Maven, Git, Docker, Gradle, Jenkins, GraphQL

Databases: MySQL, PostgreSQL, MongoDB

General: Design Patterns, Data Structures, Algorithms, Embedded Systems, Object Oriented Programming (OOP)

COMPETITIONS

- **Competitive Programming — Modifier** by IEEE — HSB

Rank: 1st (Certified)

Feb - Apr 2017

- **IEEE RAS Helwan Student Chapter**

Rank: 3rd (Certified)

Nov 2015 - Mar 2016

WORKSHOPS

- **UI Web Development** at ITWORX (Certified)

Feb 2017

- **Web Development** at ITWORX (Certified)

Feb 2016

- **Intro to Embedded Systems** at New Horizons (Certified)

Aug 2015

PROFESSIONAL ACTIVITIES

- Jury Member in 2nd Egyptian Junior Researcher Competition

— 12th Undergraduate Research Forum (UGRF): Special Edition

Aug 2021

- Technical Judge in Modifier 4.0 Hackathon by IEEE — HSB

Apr 2020

VOLUNTEERING ACTIVITIES

- Marketing committee Member at Eng break Student Activity

Jan - May 2018

- IT committee Head at Meshwar Student Activity

Aug 2016 - Jun 2017

- Academic committee Head at Nedar Student Activity

Oct 2016 - May 2017

- IT committee Member at Communication Team Student Activity

Jun - Sep 2016

- IT committee Member at Pixels Student Activity

Nov 2015 - May 2016

- Education committee Member at Nedar Student Activity

Nov 2015 - May 2016

- Academic committee Head at Communication Team Student Activity

Oct 2015 - May 2016

- IT committee Vice Head at 4P Egypt MP Student Activity

Oct 2015 - May 2016

- Writer at Science Shop Magazine

Jul 2015 - May 2016

- HR committee Member at 3C FEHU Student Activity

Jun - Oct 2015

- Academic committee Member at 3C FEHU Student Activity

Oct 2014 - May 2015

- IT committee Member at 4P Egypt MP Student Activity

Oct 2014 - May 2015

REFERENCES

Available upon request.