Mohamed Ibrahim

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Education

The American University in Cairo, *MSc Computer Science, 3.6/4 GPA*   **Expected Graduation Dec 2023**
<u>*Awards and Honors:*</u> Laboratory Instruction Graduate Fellowship, University Fellowship
<u>*Relevant Courses:*</u> Analysis and Design of Algorithms, Advanced Artificial Intelligence, Advanced Network Modeling, Advanced Software Quality, Distributed Systems, Mobile and Pervasive Computing, Natural Language Processing, Neural Networks and Genetic Algorithms.

October Modern Science and Arts University, *BSE Computer Engineering, 3.6/4 GPA*   Sept. 2012 - July 2017
<u>*Awards and Honors*</u>: Honoring Certificate, Certificate of Achievement, Certificate of Excellence, Dean's list

Experience

Coursera, *Guided-Project Instructor*   Dec. 2022 - Present
- Develops and designs instructional materials for guided projects, including instructional videos, readings, and quizzes.

Coventry University (The Knowledge Hub Universities), *Assistant Lecturer, AWS Educator*   Sept. 2021 - Present
- Instructs labs in The Security Professional, Skills Development 2, Programming and Algorithms 1, Programming and Algorithms 2, Practical Pen-Testing, and Web Security.
- Reduced more of half-time in code management by integrating labs with version control (GitHub Classroom) in Python.

The American University in Cairo, *Research Assistant*   Jan 2021 - Present
- Assisted with the developing and implementing of machine learning models in Indoor localization Positioning.
- Conducted data collection and analysis using various research methods, solutions development, and experiments.

University of Prince Edward Island (Universities of Canada in Egypt), *Teaching Assistant*   Jan. 2020 – Sept. 2021
- Instructed labs and holds office hours in: Comparative Programming Languages, Computer Practices in Linux, Computer Science 3 in Java, Data Structures, and Algorithms.
- Doubled students' engagement by creating problem-solving group work using Jamboard and Miro.
- Boosted students' performance in labs by 35% by applying unit testing and module testing in Java.

October Modern Science and Arts University (MSA), *Teaching Assistant*   Feb. 2019 – Dec. 2019
- Coordinated labs for more than 200 students in: Introduction to computer programming in C++, Cloud Computing, Artificial Intelligence, System Analysis, and Design.
- Provided 1-on-1 mentorship for senior students' graduation projects in collaboration with Valeo sponsorship.

Main Armored Tank Workshop, *Full Stack Web Developer*   Dec. 2017 – Dec. 2018
- Researched and defined user requirements for the production system resulting in improved production operations by 50% by constructing digital phases.
- Developed and executed production system that includes 12 phases of production as assembly and tracking vehicles.

Egyptian Space Agency, *Software Developer & Intern*   Sept. 2016 – Aug. 2017
- Researched space grade systems to develop communication subsystem more efficient by 25% in power saving.
- Developed and debugged CubeSat firmware reducing hardware resources by 50% and latency by 20%.

Projects

IRWI App, contract with FAO, Frontend developer   June 2020 – Aug. 2020
Increased farmers' engagement by 25% by designing simpler UI/UX for web & mobile apps. *Written in HTML, CSS, Bootstrap, JavaScript, AJAX, jQuery, ASP.NET*

Co-Reals Real Estate Web-App, Freelancing, Full stack developer   June 2019 – Dec. 2020
Constructed sales and vendor systems reduced operations time by 10% per quotation. *Written in HTML, CSS, Materialize, JavaScript, AJAX, jQuery, PHP, MYSQL*

Smart Irrigation App, FAO Hackathon, Frontend developer   Mar. 2019 – Apr. 2019
Built prototype solution to solve water scarcity in Egypt by 40% annually. *Written in HTML, CSS, Materialize, JavaScript, AJAX, jQuery, PHP, MYSQL*

Production Control System, Full stack developer   Dec. 2017 – Dec. 2018
Developed system automated maintenance phases that accelerate processes by 50% by digitalize phases. *Written in HTML, Bootstrap, JavaScript, AJAX, jQuery, PHP, MYSQL, Apache server, Linux*

Extracurricular

The FAO of The United Nations, Hackathon   Mar 2019 – Apr. 2019
Designed and pitched a mobile irrigation app prototype to save 40% of water annually due to water scarcity in Egypt.

IRC-Embassy of The United States of America, workshop   Oct. 2017
Strengthened entrepreneurial strategies by 35% for tech startups by mitigating risks.

The National Telecommunication Institute (NTI), workshop   Sept. 2017
Reduced execution process of IoT projects by 20% by rearranging projects hierarchy.