

EDUCATION

- **Cairo University, Faculty of Engineering** Giza, Egypt
Bachelor of Engineering in Communications and Computer; GPA: 3.31 *Sep. 2015 – May. 2020*

WORK EXPERIENCE

- **APTIV (EJAD BOT)** Free Zone, Naser City
Embedded Systems Software Engineer *Oct 2022 - Present*
 - **MPIC- Multi-Purpose Interior Camera:**
 - * Developed APIs used by testing tool "Test Commander" in Python.
 - * Tested the software in level of SWE.5 "Integration" & SWE.6 "Qualification" testing following ASPICE model.
- **Cairo University, Faculty of Engineering** Giza, Egypt
Teaching assistant *Oct 2021 - Jun 2022*
 - **Programming Techniques course:**
 - * Co-instructed C++ basics and function versus object-oriented programming.
 - * Evaluated students' assignments and quizzes.
 - **Data Structures & Algorithms course:**
 - * Co-instructed data structures representations in storage media and memory allocation.
 - * Co-instructed searching and sorting algorithms.
 - **Advanced Programming Techniques course:**
 - * Co-instructed Programming Techniques in Network and various Media Types (e.g multithreaded programming, Internet programming).
- **Advansys ESC** Free Zone, Naser City
RPA developer intern *Sep 2020 - Mar 2021*
 - **Bupa:** Supported in the maintainace of deployed robots using UiPath, Blue Prism, and Automation Anywhere framworks.

ACADEMIC PROJECTS

- **Lipify - Lip Reading Application, Graduation Project:**
 - Developed a system that can predict the user's words based on selected categories and using only lips movements.
 - Built a lips recognition module using image processing in python.
 - Implemented a feature extraction module using DCT and LDA.
- **Arabic Optical Character Recognizer, Pattern Recognition Course:**
 - Built an offline OCR system using TensorFlow; depending only on classical approaches to extract features.
- **FIFA Analyzer, Big Data Course:**
 - Provided meaningful insights and analysis of clubs, age distribution among top valued clubs, and superstars skills.
 - Built a linear Regression Model using R to predict player's market value.
 - Built a Polynomial and Linear Regression Models using R to predict player's wage.
- **Scrabble Engine, Machine Intelligence Course:**
 - Developed an intelligent agent that plays the scrabble board game.
 - Integreted and tested the Monte-Carlo Module in the system.
- **EmojiCode, Compilers Course:**
 - Implemented a lexer, parser, and compiler for a language of emojis using Lex and YACC.

ADDITIONAL EXPERIENCE AND AWARDS

- **CURT Cairo University Racing Team**

- Participated in Formula Students Competition 2020.
- Built the main dashboard and failure system.

Cairo University
Sep 2019 - Jun 2020

- **Embedded Systems Diploma**

- Studied Embedded C, AVR Micro-controllers Interfacing, and RTOS.
- Built a door locking security system using TivaC.

Eng. Mohamed Tarek
Sep 2019 - Jun 2020

- * Implemented a Security System consists of two ECU's. HMI which is responsible for interfacing with the user and control ECU which is responsible for the system operations and control.

- **B1 German Certificate**

Goethe Ins.

- **C1 IELTS Certificate**

IDP Education

PROGRAMMING SKILLS

- **Languages:** Python, R, C++, C, C#, Java, Javascript, PHP, HTML, CSS, JQuery, SQL, VHDL
- **Technologies:** OpenGL, GIT, Polarion, JIRA, TensorFlow