ABDELSALAM ELTAMAWY

Self Introduction Video ▶

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EDUCATION

The American University in Cairo (AUC) 📅 *2017-2022*
📍 Cairo
› BSc in Computer Engineering
› Graduated with High Honors. GPA: 3.6/4.0

International School for Elite Education 📅 *2011-2017*
📍 Cairo
› Graduated with High Honors

SELECTED PROJECTS

Machine learning based decompiler ○ 📅 *2021-2022*
[Python] [Pytorch] [Graph ML] [Anaconda]
› Completed Bachelor thesis
› Transformer based decompiler targeting android.
› Novel tree graph generator for AST representation.
› Designed to be a forensic malware tool.

Persistance of vision display ○ 📅 *2021*
[Embedded] [C] [STM32] [ESP32] [HAL] [ESP-IDF]
› Created high speed fan display and embedded system to fulfill millisecond timing constraints.
› Featured embedded web server for user accessibility.

Distance sensor from scratch 📅 *2021*
[Embedded] [C] [STM32]
› Ultrasonic distance sensor.
› Reverse engineered market to create more accurate sensor.

RISC-V microarchitecture ○ 📅 *2021*
[Verilog] [RISC-V ASM] [Xillinix]
› Implemented 6 pipeline RISC-V microarchitecture on an FPGA in Verilog fulfilling specification requirements.

LANGUAGES (Lines of Code) ›

[Python(38k)] [C++(35k)] [LaTeX(25k)] [Verilog(5k)] [Java(5k)] [Kotlin(2k)] [Rust(2k)] [Dart(2k)] [Javascript(2k)] [Bash(1k)] [SQL(1k)]

HOBBIES

PC enthusiast
› Build own liquid cooled computer.
› Administer homelab with file, surveillance, DNS servers.

3D printing enthusiast
› Designed own 3D printed robot components.

Travel
› Traveled to most of Europe, the U.S.A, the Middle East and Africa

EXPERIENCE

Undergraduate teaching assistant
📍 AUC
› Assembly&Comp Organization 📅 *2021-2022*
› Computer Architecture 📅 *2020-2021*
› Department Tutor 📅 *2019-2020*
› Programming Fundamentals 📅 *2018-2020*

Lead research intern 📅 *2020-2021*
📍 AUC
› Led team of 4 to create a process that builds application specific RISC-V based CPUs.

AI development intern 📅 *2020-2021*
📍 Tod-Z (remote)
› Lead AI and machine learning development.
› Built entire machine learning stack from concept to training to deployment.

Intern 📅 *2020*
📍 Agile technologies (remote)
› Built web store using OutSystems.
› Regularly communicated for quality assurance.

EXTRACURRICULAR

Reacreational scuba diver 📅 *2009-present*
📍 Red Sea
› Licensed 2-star CMAS scuba diver.
› Over 200 dives in the red sea.

ROV media head 📅 *2017-2019*
📍 AUC
› Led team of 5 to market and document Robotics club remotely operated vehicle events.
› Photographed and documented dozens of events and directed 4 marketing videos.

COMPETITIONS

HackTrick Hackathon [Reinforcment ML] 📅 2022
ICPC ACM [Youngest participant] 📅 2022
Code Geist Hackathon [Android App] 📅 2019
MATE ROV [PCB design] 📅 2017-2019
NASA Camp [1st place] 📅 2015
Student Expo [1st place] [Robotics] 📅 2014

SKILLS ›

[Git VCS] [Linux] [Docker] [English] [Arabic]