ABDELSALAM ELTAMAWY

Self Introduction Video ▶

✉ solomspd@aucegypt.edu   📞 (+02)01003435365
○ github.com/solomspd   📍 Nasr City, Cairo, Egypt
in linkedin.com/in/abdelsalam-et

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.
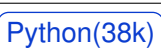> Featured embedded web server for user accessibility.

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