# ABDELSALAM ELTAMAWY

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## **EDUCATION**

The American University in Cairo (AUC)

2017-2022

BSc in Computer Engineering. GPA: 3.6/4.0

International School for Elite Education (ISEE)

2011-2017

IGCSE. Graduated with high honors.

#### TECHNICAL SKILLS

- Versed in C++(35k), Latex(20k), Python(15k), Verilog(5k), Java(3k), kotlin(2k), rust(1k), dart(1k), shell(500), Javascript(400), SQL(300), MongoDB(200), PHP(100), CSS(100), HTML(150) and Ruby(100). Numbers indicate lines of code written in language.
- Experienced in machine learning; built multiple models that are used in production.
- Experienced with embedded development; built applications including POV display using STM32 and ESP MCUs.
- Experienced with Git version control; used it to collaborate and manage dozens of project repositories.
- Experienced in CUDA GPU acceleration; built own CUDA accelerated machine learning library. Developed C++ CUDA accelerated image processing and CUDA accelerated math library.
- Robot enthusiast. Built several robots, including a cleaning vacuuming robot with a gripper arm.
- Experienced 3D printing enthusiast; designed and printed dozens of my own robotics components and personal projects.
- Programmed various games and applications, including a fully featured version of pac man, a text compression tool and a circuit netlist generator for boolean expressions; mostly in the language C++.
- PC enthusiast, built my own liquid cooled computer. Built and setup file, surveillance, DNS and game servers.

#### **EXPERIENCE**

# Undergraduate teaching assistant, Assembly & Computer Organization, AUC

2021-2022

Worked as an undergraduate teaching assistant for assembly and computer organization course. Explained instruction set architecture, ASM and caching concepts to students.

#### Lead research intern, Computer Science and Engineering Department, AUC

2020-2021

Lead a team of 4 to create an automated process that builds application specific RISC-V based CPU implementations; Written mostly in Python and Verilog

# Undergraduate teaching assistant, Computer Architecture, AUC

2020-2021

Worked as an undergraduate teaching assistant for computer architecture course. Explained micro-architect implementations for pipelined and single cycle RISC-V based CPU as well as cache implementations.

## AI development intern, Tod-Z, Estonia

2020-2021

Lead AI and machine learning development. Built their entire machine learning stack; from concept to training and deployment. Remotely carried out development.

## Intern, Agile technologies, Egypt

2020

Built fully featured web store using OutSystems. Remotely communicated regularly with team to ensure quality. Gained a great deal of experience with remote work and organization.

# Tutor, Computer Science and Engineering Clinic, AUC

2019-2020

Tutor of the student driven computer science and engineering "clinic"; an organization that is meant to provide support to students of the first 4 levels of computer science and engineering through sessions and one on one tutoring sessions.

## Undergraduate teaching assistant, Programming fundamentals, AUC

2018-2020

Worked as an undergraduate teaching assistant for the second level of computer engineering; helping students understand programming concepts; Also maintained ACM scoreboard used by university.

#### **EXTRACURRICULAR ACTIVITIES**

#### Recreational Scuba Diver, Scuba Diving, Independent

2009-present

Licensed 2-star CMAS scuba diver; preformed over 100 scuba dives in the Red Sea.

# ROV Multimedia Head, Robotics Club, AUC

2017-2019

Led team of 5 to market and document ROV events. Photographed and filmed dozens of events. Filmed and edited 4 videos for marketing purposes. Designed brochures to advertise robotics classes. Gained more experience on how to lead Multimedia Member Literature Club, AUC

2018-2019

Photographed 3 events and created posters for marketing purposes.

# Multimedia Member, Peer Leader Advising (PAL), AUC

2018

Photographed half a dozen events. Created 3 animated and heavily edited videos officially published by University.

# Assistant Multimedia Head, AUC Insider, AUC

2017

Photographed dozens of events. Published over a dozen photographs in the University newspaper.

## Camper, NASA Camp, Independent

2015

Attended NASA camp in Atlanta, USA. Won "Best Camper" award.

## **COMPETITIONS**

# Participant, International Collegiate Programming Contest, AUC

2019

Entered the local ICPC ACM after gaining experience and practice in competitive programing; achieving  $9^{th}$  place. Was the voungest participant.

# Participant, Code Geist hackathon, Sefr Wahed

2019

Created an app and it's pitch in 48 hours with a team of 4; developed an environment centric mobile application meant to encourage and reward individuals for collecting litter.

## ROV electronics member, Robotics Club, AUC

2017-2019

Entered with the university's Remotely Operated Vehicle (ROV) team that participated in the international MATE competition; Greatly contributed to circuit design and mechanical design.

# Contestant, Science fair, Student Expo 2014

2014

Won first place at the high school level with a 4 wheeled remote controlled robot featuring a 3-axis arm.

#### **SKILLS**

- Very fluent in written and spoken English and Arabic.
- Professional Photographer.
- Proficient in Adobe After Effects, Premier Pro, Photoshop, Illustrator, InDesign, Autodesk 3Ds MAX and Blender.

## TRAVEL

Travelled to most of Europe, the U.S.A, the Middle east and Africa