

Ismail Ahmed El-Sharkawy

Tagamoa 5, Cairo, Egypt ■ (+20) 1279955554

ismail@aucegypt.edu

PROFILE

Analytical and solution-oriented Computer Engineering graduate with a wide variety of technical skills. Passionate about Application Development specializing in both frontend and backend. Constantly looking to further improve knowledge in system design to best utilize specialization in the creation of scalable / robust / client pleasing applications.

EDUCATION

UDACITY FRONTEND WEB DEVELOPEMENT NANODEGREE

Feb 2021 – Jun 2021

UDACITY DATA ANALYSIS ADVANCED NANODEGREE

Dec 2020 – Feb 2021

UDACITY CLOUD NATIVE APPLICATION ARCHITECTURE NANODEGREE

Aug 2022 – Oct 2022

THE AMERICAN UNIVERSITY IN CAIRO

Sep 2015 – July 2020

Bachelor of Science in Computer Engineering

Egypt

GPA: 3.34

Thesis Research Project:

An advanced machine learning ensemble anomaly detection model aiming to detect DDoS attacks with as high of an accuracy/precision as possible in the shortest period.

Grade: A

INTERNATIONAL SCHOOL OF ELITE EDUCATION

June 2015

Egypt

GPA: 3.9 (American High School Diploma)

PROFESSIONAL EXPERIENCE

Genify

Egypt

Full-Stack Engineer

Jan 2021 – Present

- Responsible for developing the company's website using React JS.
- Responsible for developing company products (Frontend and backend) using React JS and flask.
- Responsible for designing/creating/deploying one of the company's product's postgres database.
- Created all the scripts needed to ease other developers' workflow.
- Responsible for Onboarding new members and providing support when needed.
- Created an easy-to-use demo GUI so anyone interested can try product features online.
- Developed a demo mobile application using React Native for more realistic demoing of product pipeline.
- Creating a bank facing dashboard for one of the company's products.
- Creating a full CICD pipeline to smoothen the dev team's workflow.
- Hosting the product on an AWS EC2 instance and setting up RDS and S3 buckets files when required.
- Build Data Collection React Native module (SMS, Periodic Location, Contacts, Applications) for easy integration with client codebase.
- Plan sprint in an agile manner and lead team of four developers.
- Scale product to handle nearly 10x+ more traffic through different methods including:
 1. Switching from using a single EC2 to a Kubernetes based system.
 2. Extending Architecture to include read-only databases, and a properly optimized cache for our use case (Redis) to increase throughput.
 3. Implementing and Integrating Kafka message brokers for batch processes.
 4. Using async logic where feasible to speed up pipeline.
- Refactor codebase to make use of multiple design pattern that ease understanding and future scaling.
- Ensure all features have properly encompassing unit-tests supporting them.
- Work directly with clients to ensure their additional requirements alongside their developers' questions are timely addressed.

Spectrum

Egypt

Web Developer

Jul 2019 – Sep 2019

- Responsible for the implementation of an E-Commerce website using Woo Commerce on WP platforms.
- Customizing the default template using HTML, CSS, and JavaScript.
- Integrating with a payment aggregator using Restful.
- Integrating services with various social media platforms.

Technical Skills	Programming (Python , Node , Express , JavaScript , HTML , CSS , ReactJs , React Native , C, C++,) DevOps (Git) Object Oriented Programming Data Structure Software Development ML algorithms
Technologies & Tools	Flask Django React Native React Postgres AWS EC2 AWS RDS AWS S3 AWS EKS MongoDB Android Studio Mongoose GraphQL Testing libraries Redux Axios
Languages	Arabic: Native English: Excellent French/ Spanish: Novice

SELECTED PROJECTS

- Full stack MERN E-commerce website.
- Full stack E-commerce website build with: React, Firebase, Stripe, GraphQL, Redux. Tested with Jest and converted to a PWA.
- Full stack Django real estate website.
- Given a Business Requirement Document (BRD) for a basic CRM module in an ERP system. Created a customer directory performing actions that are explained in the BRD for Elesol company.
- Fully functional React video playing website using the YouTube API.
- Implemented an online ride sharing system using Node JS, React JS along with bootstrap.
- Implemented a heart-beat anomaly detection model using Keras with a 94% accuracy and deployed the model on an STM32 microprocessor using STM32.AI and C/C++ for real-time inference
- Implemented a distributed systems application to send and receive large images using C++.
- Developed an android wedding application prototype using android studio.
- Application used to demo user applying for a loan after getting scored, developed from user sign up to loan processing. (React Native)

SIDE ONLINE LEARNING

- MIT 6.006 Introduction to Algorithms Spring 2020
- Learning S.O.L.I.D Programming Principles by Steven Lott (LinkedIn Learning)
- Object Oriented Design by Olivia Stone and Barron Stone (LinkedIn Learning)
- Python Parallel and Concurrent Programming by Olivia Stone and Barron Stone (LinkedIn Learning)
- Microservices Foundations by Frank P Molley (LinkedIn Learning)
- Learning RabbitMQ by Peter Morlion (LinkedIn Learning)
- Learning Relational Databases by Adam Wilbert (LinkedIn Learning)

OTHER EXPERIENCE

- Member in ICGE PR team
- Actor in winning play taking place in 57357 hospital in the “You’re the role model” event.
- Member in robotics club.
- Participated in organized entertainment trips to orphanages.

PERSONAL INFORMATION

- **Military Status:** Exempted
- **Date of Birth:** 2-2-1998
- **Nationality:** Egyptian