

Asmaa Nagy

JUNIOR SOFTWARE ENGINEER · ALEXANDRIA, EGYPT (READY TO RELOCATE)

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Profile Summary

An innovated and self-motivated Software engineer with 3+ years of combined experience in summer internships, freelancing, part-time jobs, boot camps, and university projects. Translating business and functional specifications into clean code solutions with the best quality of service while meeting deadlines. Reliable team player and constantly updating technical and personal skills.

Education

Faculty of Engineering, Alexandria University

Bachelor of Engineering

JULY 2024

- **Grades:** CGPA: 3.1, Last Two Years Avg GPA: 3.55, Penultimate semester GPA: 3.78, last term GPA: 4
- **Major:** Communications and Electronics
- **Minor and Sub-Minor:** Computer Software Engineering
- **Courses:** Network, Digital and wireless communications, Embedded systems using C programming, SW python development, Data structure and Algorithms, Database, Operating systems, AI search algorithms and Machine Learning
- **Graduation Project:** **Smart Safety Helmet** Mobile App as a user interface associated with IOT modules, Microcontroller(ESP32 with built-in WiFi/Bluetooth), with real-time notifications and sensors to monitor, detect, and help workers in emergency scenarios. I was the leader of the SW sub-team. We used: Flutter cross-platform, dart language, Firebase real-time database, Firestore collections, several tools/packages e.g.:(sqlite, shared preferences, launcher icons, sliders/animations, Flutter phone direct caller, Google Maps APIs and sign-in,..., etc).

Projects

Mobile App Development

2022 - Present

- E-commerce production apps, ex:(**E-Solar** App, **Cadeau** App): using CI/CD pipelining, Flutter/Dart, including authentication, pagination, navigation, verification pin code, home/profile/products pages,& ..etc
- **Racemate:** sports app to train and find running companion, including: Filters search, file structure, repositories, API services, & extensions.

Backend Development

2021 - Present

- Company DBMS: **Database** with departments/employees tables, ER models, MySQL queries, stored Procedures, Functions,& triggers.
- **Shell scripting**, C/C++ CPU **scheduling** Algorithms using Linux OS

Python AI/ML Engineering

2020 - 2022

- ML **classification & neural network** using Libraries: scikit-learn, PyTorch, pandas, matplotlib.
- AI Search Algorithms: **8-Puzzle** Game (Informed & Uninformed Algorithms), AI Agent of **Connect-4** Game (using Minimax Algorithm).

Skills

Fundamentals	OOP, Data Structures and Algorithms, Design patterns, SOLID principles, OS, Database, Web Security Basics.
Languages	Dart, C/C++, SQL, Python, Java, HTML/CSS, UML, DML, ERD, MATLAB, VHDL.
Platforms	Flutter cross-platform, mySQL DBMS, Firebase/Firestore Platform, Agile project management tool (Jira).
Libraries	Flutter Packages(shared preferences, sqlite, http, animation,..etc), OpenCV, Matplotlib, Scikit Learn, PyTorch, NumPy, Keras.
SW Tools	Git (GitHub, Bitbucket), Eclipse, PyCharm, Colab, Visual Studio Code, Android Studio, WordPress, Slack, AutoCad.
GUI Tools	Figma, PhotoShop CS6, Qt Designer.
HW Tools	Arduino, PCB designing using: Altium, Proteus.
Simulation Tools	Cisco Packet Tracer, WireShark analyzer, Multisim, Modelsim, LabVIEW.
Miscellaneous	Linux(Ubuntu using Oracle VM VirtualBox), Shells (cmd, PowerShell), LaTeX (Overleaf), Microsoft Office and Master ICDL.
Soft Skills	Problem-solving, Prioritizing, Creativity, Presentation skills, Straightforwardness.

Work Experience

Inova LLC - Mobile and Web Development Corporation

Alexandria EG, UAE, KSA

SW Engineering Intern

July 2023 - Oct 2023

- Frontend using Flutter/Dart Android and IOS mobile apps, State management using (provider & Riverpod) packages, data-flow controllers.
- Backend using Firebase, Firestore, and Postman RESTful APIs.
- Integration teamwork brings together project managers, UX/UI designers, backend developers, and Flutter team through virtual and on-site meetings.
- **Technical Skills:** Meet tasks deadlines using Native features, Flutter packages e.g.:(http, image picker,uuid, dio, ..etc), and common platforms, like: Firebase, Bitbucket, Figma, Postman, Jira as an Agile project management tool, and Slack.Including CI/CD maintenance, localization, dark mode, app environments:(development, staging, production), and introducing flavors.
- **Soft Skills:** Teamwork, Time Management, Communication, Presentation skills.

AIT Systems Corporation for web design, cloud hosting, and development services.

Alexandria EG

SW Engineering Intern

Aug 2022 - Sep 2022

- Web development, security principles, visual design, and mobile app in the **SPS** smart parking system project.
- Coordinating with AASTMT, ITIDA, and Alex University. using: (Dart, Flutter WebView, MySQL, WordPress, Photoshop CS6 in logo/icons design).

The Sparks Foundation

Remotely, India and Singapore

GRIP(Graduate Rotational Internship Program)

Feb 2022 - April 2022

- Python codes to collect, analyze data, Build & tune models, Colab ML Classification, Neural Network, and AI Search Algorithms.

AMOC "Alexandria Mineral Oils Corporate"

Egypt

Engineering intern

Sep 2021

- Two Weeks intern at the SW, IT, and Network Department.

The Arab Academy for Science, Technology and Maritime Transport (AASTMT)

Egypt

Six weeks Of C++ Language Training

2014

- Prepared for the ACM and IOI (International Olympiad in Informatics for secondary school students).

Achievements

2024	Silicon Mind Corporate for SW, DevOps,& Network Solutions , Accepted Academic Visitor	Smouha
2020	Main WE Central: Software maintainability, Monitoring & for NW & Servers , Accepted Academic Visitor.	Alexandria.
2017	1st place Winners , Team2 main Researcher, "BCI & EMG using EEG technique" review paper, PHD-17.	A+ association
2016	Winner Of Full Scholarship STEM Foundation Courses , Zewail City for Science and Technology.	Cairo EG
2015	4th winner, ZCSF conference , College students' category of scientific proposals, although I was still in secondary school.	Zewail City
2014	Selected SW Trainee For ROV submarine Robotics Team , , YESBU/LYM In Bibliotheca Alexandrina	Egypt

Volunteering

- A member of IEEE Solid-State Circuits Society Alex Students' Chapter, Machine learning team, 2020 - 2023.
- A software and AI trainee at Torpedo technical team in FOE, Alex Uni in 2021.
- Participated in AI and ML summer sessions (offered by: CSE department, Faculty of Engineering, Alex.Uni.)
- Certificated after finishing the tasks of the Machine Learning course offered by Stanford University.
- A Participant in PCB sessions at Alex Engineers Syndicate.
- An E-Web school session participant (EWeb student chapter), a volunteer at Resala org (2013-2021), & Naqaa Nanotechnology member (2014).
- Participated in ICNLP presentation skills sessions including using (Photoshop CS6) and (Filmora Video Editing).
- A researcher in the "Science Geeks" project in "Bibliotheca Alexandrina" for the scientific theater in 2015.
- An active participant in YESBU in "Bibliotheca Alexandrina" and the LYM from 2014 until the end of 2015.
- Teaching "Quran and the biographies of Sahabah", creating innovative educational games for the junior.
- **Initiatives:** founder of the "Change Lives " association aimed at better education by sharing jobs and scholarships.

Extra-Activities

Technical Help Desk support, Al-Nasr Company, 2017 - 2018:	Responsible for : market research, Excel data analysis, technical help desk, and product advertisements.
Junior Remote Translator, Freelancer, 2018 - 2019:	Translated written Arabic Islamic books into English to help African Muslims in "Direct Aid Organization".
Technical Trainee, Etisalat office "the Arab Group", 2018 - 2019:	Responsibility for the office system administration.
Technical Trainee, "TARGET" For Importing Electronics, 2019:	Responsibility for the SW/HW Maintenance & Repairing of the imported electronic devices.

Languages

Arabic	Native
English	Professional Proficiency (510 in ITP TOEFL).
German	Intermediate Mid.
French	Elementary Proficiency

References are available upon request.