

# Mohamed Samir

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## OBJECTIVE

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*I am seeking a competitive and challenging environment where I can serve and establish an enjoyable career for myself.*

## EDUCATION

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### Faculty of Computers and Artificial Intelligence – Cairo University

Cairo, Egypt

BSc. in Computer Science – Major: Computer Science; **GPA: 3.51/4.00**

Sep 2009 – May 2013

MSc. Degree in Computer Science;

Sep 2015 – May 2021

PhD. Degree in Computer Science;

Sep 2022 – May 2027 (Expected)

## SKILLS

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**Programming Languages:** C, C++, Java, Python, C#, Javascript, GO, Typescript, PHP, SQL

**Frameworks:** NodeJS, Express JS, Django, Flask, FastAPI, SpringBoot, Laravel, ASP.NET Core

**Tools:** Git, GCP, AWS, Docker, Kubernetes, Jenkins, Kafka, Serverless Functions, MySQL, Mongo DB, Redis, PostgreSQL

**Spoken Languages:** Arabic (Native), English (Fluent)

## WORK EXPERIENCE

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### ZID

Senior Software Engineer (Squad Lead)

Jan 2023 – Current

- Lead the "Cart & Checkout" squad to revamp Cart and Checkout systems
- Improve the performance of the checkout process by 20%
- **Programming Languages and Tools used:** Python, Git, Github Actions, PHP, Laravel, AWS, Docker, Kubernetes, MongoDB, MySQL, Redis

### SWVL

Senior Software Engineer (Squad Lead)

Oct 2020 – Jan 2023

- Lead the "Research Software Engineering" (RSE) squad to build tools and platform for the R&D Engineers.
- Participated in building a model to handle emergency rides, This model enhances our handling for emergency rides by 40%.
- Participated in building a simulator engine for all SWVL marketplace systems. The simulator is used to perform real experiments with an accuracy of 95%.
- Lead the "ETA" squad to build a unique system to predict distance and duration in an accurate and cost-efficient way.
- Increase the accuracy of ETA predictions by 20%
- Decrease the cost to get the ETA estimates by 40%
- **Programming Languages and Tools used:** Python, NodeJs, Go, Java, MySQL, Redis, PostgreSQL, MongoDB, Kubernetes, Ray, Airflow, Google Cloud Platform, Git, Github Actions, Jenkins, Machine Learning

### Cognitev

Senior Software Engineer

Mar 2018 – Oct 2020

- Worked in designing and developing an "Instascaler" product that helps in automating digital marketing campaign activities.
- Given more than 1B records of google analytics data, I Implemented an AI-based service that helps in taking decisions in a digital marketing campaign lifecycle using different data analysis and machine learning techniques.
- Worked in designing and developing Ads Optimization Engine to optimize auto-created ads concerning some constraints.
- **Programming Languages and Tools used:** Python, NodeJs, Django, MySQL, Redis, PostgreSQL, MongoDB, Kubernetes, Google Cloud Platform, Git, Bitbucket pipelines, Jenkins, Machine Learning

## ITWORX

*Senior Software Engineer*

*Jan 2017 – Apr 2018*

- Worked in designing and developing "Bio Design" Software that helps in simulating the process of planting crops or seeds and provides different statistics.
- Developed "Green Leaf" Software that provides agriculture statistics from different perspectives and some predictions that help scientists to take decisions during planting crops and seeds process. These solutions are built based on more than 1M data items which represent past agriculture experiments.
- **Programming Languages and Tools used:** Python, ASP.NET, MySQL, PostgreSQL, Microsoft Azure, SVN, Machine Learning, Angular, Aurelia JS

## ComputeK

*Software Engineer*

*Jan 2014 – Jan 2017*

- Worked in developing learning management systems that contain some programming lessons and games to teach programming to kids
- Worked in developing Business Leads systems that provide the company services and record the data of interested users
- **Programming Languages and Tools used:** Python, Java, PHP, Angular

## ASTF

*Software Engineer*

*Aug 2013 – Jan 2014*

- Worked in developing a newsletter for ASTF company
- Worked in developing Business Leads systems that provide the company services and record the data of interested users
- **Programming Languages and Tools used:** PHP, Joomla

## Meteksan Defense Industry Inc.

Ankara, Turkey

*Analog Design Engineering Intern*

*Jul 2021 – Aug 2021*

- Designed numerous analog circuits such as voltage-mode controlled buck converter, phase-shifted full-bridge isolated DC-DC converter, and EMI filters with LTspice. Integrated these circuits and implemented a 320 W power distribution unit to be used in a radar system's power circuit board.
- Researched real-world compatible electronic components to be used in such circuits including GaNFETs, high-side gate drivers, and Schottky diodes.
- Assembled PCBs of both common and differential mode filters and used VNA Bode 100 to measure the cut-off frequencies.

## RESEARCH PUBLICATIONS

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Samir, M., El-Ramly, M. and Kamel, A., 2019, November. Investigating the Use of Deep Neural Networks for Software Defect Prediction. In 2019 IEEE/ACS 16th International Conference on Computer Systems and Applications (AICCSA) (pp. 1-6). IEEE. ***Paper IEEE Link***

## REFERENCES

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Furnished upon request