

---

## EMPLOYMENT

---

<b>Senior Software Engineer</b>	<b>Statsbomb (ArqamFC)</b>	<b>Jun 2018 - May 2020</b>
---------------------------------	----------------------------	----------------------------

- As a very early hire I contributed to every part of the company's codebase and Infrastructure.
- I was part of the architects team which is responsible for designing a real-time event driven infrastructure on top of Apache **Kafka**, Apache **Beam**, **GKE** and Google **Dataflow**.
- Contributed to building a hyper-cloud infrastructure using **K8s**, **Helm**, **terraform**, **GKE**.
- Led a team of 4 Backend Engineers working on the data products. Interviewed more than 15 engineers.
- Started an internship program and I was responsible for technical interviewing, mentoring and evaluation.

<b>Remote Software Engineer</b>	<b>Floralytics</b>	<b>Sep 2017 - Aug 2018</b>
---------------------------------	--------------------	----------------------------

- Designed and implemented a realtime web indexing and scraping pipeline on top of scrapy and phantomJS.
- Implemented an NLP framework on top of **Elasticsearch** which performs Natural language tasks on ES data.
- Implemented a **CI/CD** based on **Gitlab CI**, Microsoft **Azure** and **Jenkins**.

<b>Software Engineer</b>	<b>ABMEgypt</b>	<b>Nov 2015 –Jul 2017</b>
--------------------------	-----------------	---------------------------

- Revamped legacy systems from PHP to **Python** and **Golang** with **4x** performance increase.
- Started a data engineering team which was responsible for managing social media analytics data.

<b>Software Engineer</b>	<b>Tajjer</b>	<b>Mar 2015 –June 2015</b>
--------------------------	---------------	----------------------------

- Re-structured data collection and storage in **MySQL** which enhance the performance by 1.5x times.

<b>Software Engineer, Intern</b>	<b>ABMEgypt</b>	<b>Jun 2015 -Aug 2015</b>
----------------------------------	-----------------	---------------------------

- Worked on some backend systems which collect marketing data from Facebook **graph API**.

---

## EDUCATION

<b>M.Sc in Information Science</b>	<b>Ain Shams University</b>	<b>Sep 2020 – On going</b>
------------------------------------	-----------------------------	----------------------------

- Majored in Distributed Systems, Cloud Computing and High performance Data Processing.

<b>B.Sc. in Computer Science</b>	<b>Ain Shams University</b>	<b>2014 - 2019</b>
----------------------------------	-----------------------------	--------------------

- Graduated from the department of Scientific and High Performance Computing

---

## OPEN SOURCE CONTRIBUTION

- **Facebook/OSQuery [16K ★]** : An official **Facebook** project. I've upgraded and rebuilt build systems with python 3.
- **Okteto [1.5K ★]**: An official **Cloud Native Foundation** project. I made multiple contributions to the core of the kubernetes based project. Also contributed to a couple of design decisions.
- **Facebook/PTR [250★]**: An Official **Facebook** project. I've made some small contribution to the python testing suit. Including adding Github Action CI.
- **TextBlob-AR [50 ★]**. Author of the official **TextBlob** Arabic extension. A well-known NLP Python package.
- **SummaNLP/TextRank [800★]**: Added Arabic support to the core algorithm.
- **Weecology/retriever [250★]**: An official **NumFocus** project. I worked on performance optimization in data processing. Increased performance for large datasets 3X.

---

## ADDITIONAL EXPERIENCE AND AWARDS

- **Keynote Speaker**: Ain Shams Computer Vision Conference. Talked about MLOps and Full-Stack Data Science
- **Towards Data Science: Featured Writer** for my article about **NLP** and **LSTM** neural networks.

---

## Languages and Technologies

- Go, Python, Java, JS
- Kafka, ELK, Beam, Redis, PostgreSQL, MongoDB, ZooKeeper, etcd, Dataflow, InfluxDB
- Distributed Systems, Microservices, System Architecture ,Infrastructure
- Domain Driven Design, Event Sourcing, CQRS, Stream Processing, Reactive Architecture.
- Site Reliability Engineering, AWS, GCP, K8s.
- Prometheus, Jenkins, Github Actions, CircleCI, Google Cloud Build.