

---

## EMPLOYMENT

---

Senior Software Engineer	Statsbomb (ArqamFC)	Jun 2018 - May 2020
--------------------------	---------------------	---------------------

- As a very early hire I contributed to every part of the company's codebase, data design 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** and **GraphQL**.
- Contributed to building a cloud infrastructure and monitoring production systems and doing on-call duties.
- Led and Mentored Backend Engineers working on the data products. Interviewed more than 10 engineers including Senior, Med-level and Interns

Remote Software Engineer	Floralytics	Sep 2017 - Aug 2018
--------------------------	-------------	---------------------

- 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**.

Software Engineer	ABMEgypt	Nov 2015 –Jul 2017
-------------------	----------	--------------------

- 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.

Software Engineer	Tajjer	Mar 2015 –June 2015
-------------------	--------	---------------------

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

Software Engineer, Intern	ABMEgypt	Jun 2015 -Aug 2015
---------------------------	----------	--------------------

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

---

## EDUCATION

---

M.Sc in Computer Science	Cairo University	Sep 2020 – On going
--------------------------	------------------	---------------------

- Majored in Distributed Systems and High Performance Computing.

B.Sc. in Computer Science	Ain Shams University	2014 - 2019
---------------------------	----------------------	-------------

- Graduated from the department of Scientific and High Performance Computing

---

## OPEN SOURCE CONTRIBUTION

- **Apache/Beam [5k ★]**: An Official **Apache & Google** project (aka. Google Dataflow). I'm working on implementing the beam model and data algorithms in *Go-SDK*. Trying to become an apache committer.
- **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, Javascript
- Kafka, ELK, Beam, Redis, PostgreSQL, MongoDB, ZooKeeper, etcd, Dataflow
- Distributed Systems, Microservices, System Design , Infrastructure Engineering.
- Domain Driven Design, Event Sourcing, CQRS, Stream Processing, Reactive Architecture.
- Agile(Scrum, Kanban), Test Driven Development (TDD), Extreme Programming

- 
- Site Reliability Engineering, AWS, GCP, K8s.
  - Prometheus, Jenkins, Github Actions, CircleCI, Google Cloud Build.