OUSSAMA TRABELSI

Software Engineer and Big Data Security Researcher

📞 +216-54115317   ✉ trabelsioussama010@gmail.com   ◯ github.com/t-oussama   in Oussama Trabelsi

EDUCATION

Faculty of science of Tunis
PhD Student

📅 2019 - Present   📍 Tunis, Tunisia

Published paper: *DCBC: A Distributed High-performance Block-CipherMode of Operation*
Implementation: *C++ implementation using multi-threading as well as multi-processing*

National Institute of Applied Science and Technology
Software Engineering Degree
Major: Software engineering
Minor: Big Data

📅 2014 - 2019   📍 Tunis, Tunisia

Bourguiba Pioneer High School
High school degree with high honors

📅 2010 - 2014   📍 Tunis, Tunisia

SKILLS

- **Programming languages**: JavaScript, TypeScript, Python, C, C++, C#, Java, SQL
- **Databases**: MySQL, MongoDB, Neo4J
- **Big Data technologies**: Cassandra, Hadoop, Hive, Spark, Kafka

PROJECTS

Big Data Project
- Developing a listing tool of the most used technologies according to their appearance in the Freelancer website Job proposals.
- technologies: Kafka, Hadoop, Spark , Python

"INSAT Numerique" Project
- Developing a micro-service based web application with:
  - Business modules for handling university administrative tasks
  - An authentication and authorization module
  - A dispatching module that solves data consistency issues across the databases of the different micro-services

LANGUAGES

Arabic, **English**, **French**.

EXTRACURRICULAR

- **SECURINETS : First national association for cybersecurity in Tunisia:**
  - Head of CTF team(2016-2018): Managing a team of multiple members preparing the CTF challenge
  - Advisor(2019-present): Providing help and guidance for new heads of teams in the organization

PROFESSIONAL EXPERIENCE

Full Stack Engineer
GOMYCODE

📅 September 2020 - present   📍 Remote

GOMYCODE is a tunisian startup that aims to upskill and reskill people on digital skills through instructor-assisted trainings. It is available in multiple countries including Tunisia, Algeria, Egypt, Bahrain, etc... The teaching platform is developed and maintained by a central engineering team that I am currently part of.
- Full stack developer on an a teaching platform for students within GOMYCODE.
- Leading the migration of the application from a service oriented architecture to a microservices architecture.
- Technologies: .Net Core, Python, ReactJs, Redux, rabbitMQ, Redis, Neo4J, Azure DevOps.

C++ Freelance Engineer
University of Kentucky

📅 may 2020 - September 2020   📍 Remote

University of Kentucky is a research university in Lexington, Kentucky. I got to work directly with Dr. Adel Hamza who specializes in Biochemistry and Cell Biology.
- Working on an application for molecular alignment for drug discovery
- Parallelizing the algorithm provided by **LS-align**
- The resulting program was 4 times faster than the initial implementation

Full Stack Developer
Djiant

📅 February 2018 - August 2019   📍 Remote

Djiant is a french company that provides a SaaS platform to help businesses manage their visibility online by centralising and indexing all of their web resources in a single search platform.
- Graduation project : **March 2019 - August 2019**.
  Developing a structured search platform using automated data extraction, a backoffice for managing availability zones and a specialized search engine.
  The system was made using a service oriented architecture composed of 5 modules:
  - Data Extractor Web Front-end Application: Angular 6
  - Data Extractor Web Back-end API: NodeJS, ExpressJs, MongoDB
  - Search Engine: Setting up Elasticsearch
  - Data Querying Front-end Application: Angular 6
  - Automated Web Scrapping & Data Extraction: Python3
  - Data Extraction Progress Visualisation: Kibana
- Developing a web platform for data scraping and data validation from different web sources : **February 2018 - April 2019**.
  The platform design follows a 3-tier architecture:
  - Front-end: Angular 6
  - Back-end: NodeJs, ExpressJs
  - Database: MongoDB

Full Stack Developer
Placeholder

📅 May 2017 - January 2018   📍 Tunis,Tunisia

Placeholder is a tunisian software company which was originally centered around mobile development but later expanded its domain to web development and virtual reality.
- developing the backoffice of **robograf**
  technologies: Laravel, MySQL, ReactJs
- backend developer of a local social media platform
  technologies: Firebase, NodeJs, expressJs
- full stack developer of an application for designing custom mugs and t-shirts for a heat press machine
  technologies: MongoDB, NodeJs, expressJs, Angular