Sirine Achour

Software Engineer

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Versatile software engineer, experienced in development and passionate about automation, DevOps and security

WORK EXPERIENCE

DevOps Engineer & Frontend Developer — Apr 2021 - Sep 2021

Parcus Digital Solutions, Tunisia

An emerging startup with multiple international projects

- Introduced DevOps practices to a web application.
- Designed CI/CD pipelines.
- Implemented a dynamic form builder.
- Managed user accounts, roles and access rights.
- Designed a user-friendly and functional UI.

Applied skills : Angular, Automation, Debugging, Documentation, Docker, Git, GitHub Actions, Testing, Web design

DevOps Engineering Intern — Jul 2021 - Aug 2021

University of Michigan, USA

A highly ranked research university

- Troubleshot an AWS server instance.
- Upgraded a web app to the latest Node version.
- Analyzed and evaluated files and database tables (automatically).
- Studied, compared and merged development and production code and databases.
- Containerized a web app.

Applied skills : AWS, Automation, Docker, Documentation, Express, MySQL, NodeJS, Putty, Python, Troubleshooting

Web Development Intern — Jul 2020 - Aug 2020

DOT IT e-business solutions, Tunisia

A leader in e-business solutions in Tunisia

Developed a Prestashop module for a website of a multi-location store :
- Designed and implemented a pop-up for re-routing a new user to a chosen shop location.
- Implemented a tool for customizing the pop-up contents in the back-office

Applied skills : Git, Prestashop, Web design

ACADEMIC PROJECTS

• Chatroom — May 2021 - Present

An end-to-end encrypted and containerized chatroom.
Server code - Client code

Applied skills : Cryptography, Docker, ECIES, Git, LDAP, SonarQube, Security

TECHNICAL SKILLS

Software Engineering :
Advanced algorithms, Data structures, Design patterns, Distributed systems, Documentation, Test driven development, UML

Programming Languages :
Bash, C/C++, C#, Java, Javascript, Typescript, PHP, Python

DevOps :
AWS EC2, Cypress, Docker, Git, GitHub Actions, Kubernetes, OpenShift, Puppet, RabbitMQ, Selenium

Web Development :
Angular, CSS, Express, HTML, NestJS, Prestashop, SCSS, Symfony, Vue.js, .Net Core

Database Management :
MongoDB, MySQL, Oracle

Other :
Arduino, Matlab, STM32, Unity

SOFT SKILLS

Analytical thinking, Detail orientation, Flexibility, Teamwork, Written and oral communication

EDUCATION

National Engineering Diploma — 2017 - Present

National Institute of Applied Sciences and Technology, Tunisia

Major : Software Engineering
Focus : Software design/architecture, Development, Optimization, IT project management, Networks, Operating systems, Security
Specialization : Testing & DevOps

CERTIFICATES

Introduction to Containers with Docker, Kubernetes and OpenShift — Present

Pentesting and Securing Web Applications (EthicalHacking) — Present

Google IT automation with Python Specialization certificate — Aug 2020

General English diploma with honors — May 2015
Bourguiba institute of modern languages

ACADEMIC PROJECTS

• Collect/Connect — Jan 2021 – May 2021

A single player educational card game that showcases the art work held at the University of Michigan's library and studies the links between them. I worked, within the University of Michigan research team, on 2 of the project's 3 main axis:

- Frontend : Game design and implementation.
- Backend : Design and implementation of a database and a RESTful API.

Applied skills : AI, Database design, Documentation, Game design, Git, MySQL, NestJS, REST API, Security,Unity

• Administrative Website — Jan 2021 – Feb 2021

A website for INSAT's staff to manage students' end of studies projects.

Frontend code - Backend code

Applied skills : Angular, Database design, Git,HTML/CSS/JS, MySQL, NestJS

• Cryptographic Toolkit — Nov 2020 – Jan 2021

A console app that offers a collection of cryptography tools :

- Hashing
- Encoding
- Key generation (RSA/ECIES)
- Symmetric encryption/decryption
- Asymmetric encryption/decryption
- Cracking hashes: simple brute force attack, identifying hashes, dictionary attack.

Applied skills : Cryptography, ECIES, Git, Python, RSA

• Implementing popular AI algorithms — Nov 2020 – Jan 2021

Console games that implement popular AI algorithms.

- Nim : MiniMax algorithm with/without pruning.
- Sliding Puzzle : A* algorithm that solves (if possible) any random sliding puzzle of any size.

Applied skills : AI, Complexity of algorithms, Optimization, Problem solving, Python

SOCIAL ENGAGEMENT

Winter Cup — Feb 2020

Problem solving competition held at INSAT
Competitive Programming with C++.

Fast and Furious — Feb 2020

Robotics competition held at INSAT
Built a rally robot which involved low level programming with Arduino.

SheSolves — Jan 2020

Problem solving competition held at INSAT
Competitive Programming with Java.

ENICarthage Robots — Dec 2019

Robotics competition held at ENICarthage
Built a Rough-road robot which involved low level programming with Arduino.

ACM INSAT CPC — Feb 2018

Problem solving competition held at INSAT
Worked within the organization team.

INTERESTS

Automation, Embedded systems, DevOps, Problem solving, Security, Technology

LANGUAGES

- **Arabic** (native)
- **English** (bilingual)
- **French** (limited working proficiency)
- **Spanish** (elementary working proficiency)