

SIRINE ACHOUR

• Software Engineer •

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Versatile software engineer, experienced in development, passionate about DevOps and cybersecurity

EDUCATION

National Engineering Diploma 2017 - Present
National Institute of Applied Sciences and Technology

Major: Software Engineering

Focus: Software design/architecture, Development, Optimization, IT project management, Networks, Operating systems, Security

Specilization: DevOps, Testing

SKILLS

Technical Skills :

Software Engineering : Algorithmics, Data Structures, Design Patterns, Distributed Systems, Documentation, Serverless Applications, Test Driven Development, UML

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

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

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

Database Management : MongoDB, MySQL, Oracle

Other : Arduino, STM32, Unity

Soft Skills :

Written and oral communication, flexibility, analytical thinking, detail orientation

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 the project's 3 main axis:

- **Frontend** : Game design and implementation.
- **Backend** : Design and implementation of a database and a RESTful API.
- **AI Judge** : Comparison between 2 cards based on multiple factors (photographic and textual data).

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

WORK EXPERIENCE

DevOps Engineer & Frontend Developer
Parcus Digital Solutions Apr 2021 - Sep 2021

- Introducing DevOps practices to a web application.
- Designing CI/CD pipelines.
- Implementing a dynamic form builder.
- Managing user accounts, roles and access rights.
- Designing a user-friendly and functional UI.

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

DevOps Engineering Intern
University of Michigan Jul 2021 - Aug 2021

- Troubleshooting an AWS server instance.
- Upgrading a web app to the latest Node version.
- Analyzing and evaluating files and database tables (automatically).
- Studying, comparing and merging development and production code and databases.
- Containerizing a web app.

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

Web Development Intern
DOT IT e-business solutions Jul 2020 - Aug 2020

- Working on a website for shopping at a multi-location store :
- Designing and implementing a pop-up for re-routing a new user to a chosen shop.
 - Implementing a tool for customizing the pop-up contents in the back-office

Applied skills : Prestashop, Web design

CERTIFICATES

Introduction to Containers with Docker, Kubernetes and OpenShift Present

Pentesting and Securing Web Applications (Ethical Hacking) Present

Google IT Automation with Python Specialization Certificate Aug 2020

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

ACADEMIC PROJECTS

Chatroom Jun 2021 - Present

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

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

Administrative Website Jan 2021 - May 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 Jun 2021 - Present

A console app that offers a collection of cryptography tools :

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

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

Implementing popular AI algorithms

Jan 2021 - May 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

Wintercup 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 proficiency