Sirine Achour

Software Engineer

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

WORK EXPERIENCE

Frontend Developer & DevOps Engineer — Apr 2021 - Sep 2021
Parcus Digital Solutions, France
An emerging startup with multiple international projects

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

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

DevOps Engineering Intern — July 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/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

• 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, REST API

TECHNICAL SKILLS

Software Engineering:
Advanced algorithms, Complexity of algorithms, Data structures, Design patterns, Distributed systems, Documentation, Optimization, Testing, 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

Database Management:
MongoDB, MySQL, Oracle

DevOps:
Cypress, Docker, Docker Swarm, Git, GitHub Actions, Puppet, RabbitMQ, Selenium, Serverless, Vagrant

Other:
Arduino, Matlab, STM32, Talend, 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 artwork 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 axes:
- 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

• 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

• Task Me — Mar 2020 - Jul 2020

A website that helps people find and look for odd job workers.
Frontend code

Applied skills: Vue.js, Git, Web design

• Spill The Tea — Jun 2020

A website for posting confessions and asking for advice anonymously.
Code

Applied skills: C#, Database design, Git, MVC architecture, MySQL, Web design, .NET Core

• 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

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 that 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 that 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)