

Bilal Retiat

UNIVERSITY GRADUATE

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Experience

OpenMined

CRYPTO TEAM MEMBER

Remote

Apr. 2020 - Present

- Developing TenSEAL, a library for doing homomorphic encryption operations on tensors.
- Doing research and experimentation on applying homomorphic encryption to deep learning.

Deloitte

CYBER SECURITY INTERN

Algiers, Algeria

Feb. 2020 - Mar. 2020

- Perform web applications assessments and network penetration testing.
- Document and report findings, along with remediation recommendations and validation.

Realistic Security

SYSTEM ADMINISTRATOR (PART TIME)

Remote

May. 2019 - Dec. 2019

- Build a penetration testing training lab.
- Ensure proper security and configurations for the infrastructure for production servers.
- Manage and maintain multiple virtual machines.

El Djazair Information Technology (ELIT)

CYBER SECURITY INTERN

Algiers, Algeria

Sep. 2018

- Perform WAF evasion and bypass tests on FortiWeb.

Education

ESI-SBA (Ecole Supérieure en Informatique 08 Mai 1945)

MASTER'S DEGREE IN COMPUTER SCIENCE

Sidi Bel Abbés, Algeria

Sep. 2015 - Sep. 2020

Core Competencies

- Problem Solving
- Penetration Testing & Exploit Development
- Reverse Engineering & Malware Analysis
- Linux System Administration
- DevOps
- Backend Web Development

Skills

Programming	Python, C, C++, GO, Shell Scripting
Frameworks & Technologies	Flask, Django, MongoDB, Redis, MariaDB, SQL, XML
DevOps	Docker, Git, Github Actions
Tools	GDB, IDA, Ghidra, Radare2
Others	x86 Assembly, ARM Assembly
Languages	Arabic (Native Proficiency), English (Professional Working Proficiency), French (Limited Working Proficiency)

Extracurricular Activity

Sudo_root (CTF team)

CTF PLAYER

Algeria

Feb. 2017 - Present

- Participated on a lot of CTFs (Hacking Competitions).
- Gained expertise in hacking & security areas, especially about reverse engineering, exploit development and cryptanalysis.
- Gained expertise in penetration testing & code auditing.
- Working with teammates to consistently learn and share skills.
- Successfully managed to organize and design local CTF competitions.

Projects

TenSEAL

DEVELOPER

OpenMined, Remote

Feb. 2019 - Present

- TenSEAL is a library for doing homomorphic encryption operations on tensors, built on top of Microsoft SEAL. It provides ease of use through a Python API, while preserving efficiency by implementing most of its operations using C++.

Malware Revealer

DEVELOPER

ESI-SBA, Algeria

Mar. 2019 - Nov. 2019

- Malware Revealer is a malware classification framework, designed primarily for malware detection, it contains a modular toolset for feature extraction, as well as pre-trained models and a ready to use web API for making predictions.

Volunteer Experience

Docker Sidi Bel Abbes Chapter

MENTOR

Sidi Bel Abbes, Algeria

Nov. 2018 - Present

- Provide guidance and helping for newcomers.
- Provide hands-on Docker training.

ESI-SBA

PYTHON TRAINER

Sidi Bel Abbes, Algeria

Jan. 2019 - Feb. 2019

- Teaching Python core concepts.
- Provide practical workshops in Python.

ESI-SBA

C TRAINER

Sidi Bel Abbes, Algeria

Feb. 2019

- Teaching fundamentals of C programming.

Honors & Awards

Aug. 2020 **1st Place**, CyberTalents - Algeria National Cyber Security CTF 2020

Online

Nov. 2019 **2nd Place**, CSAW'19 CTF Hacking Competition Final (MENA)

NYUAD, Abu Dhabi, UAE

Oct. 2019 **4th Place**, HITB+ CyberWeek - Standoff Cyberbattle 2019

HITB+, Abu Dhabi, UAE

Sep. 2019 **2nd Place**, CyberTalents - Arab Regional Cyber Security CTF 2019

CSCAMP, Cairo, Egypt

Jul. 2019 **1st Place**, CyberTalents - Algeria National Cyber Security CTF 2019

ESI-SBA, Sidi Bel Abbes, Algeria

Nov. 2017 **3rd Place**, CSAW'17 CTF Hacking Competition Final (MENA)

NYUAD, Abu Dhabi, UAE

Program Committees

Feb. 2020 **Organizer & Problem Writer**, AlphaBit Coding Challenge 2nd Edition

ESI-SBA, Sidi Bel Abbes, Algeria

Jan. 2020 **Organizer & Problem Writer**, Shellmates - HackINI 2k20

ESI (ex. INI), Algiers, Algeria

Feb. 2019 **Organizer & Problem Writer**, AlphaBit Coding Challenge 1st Edition

ESI-SBA, Sidi Bel Abbes, Algeria

May. 2018 **Organizer & Problem Writer**, IngeHack CTF Hacking Competition 1st Edition

ESI-SBA, Sidi Bel Abbes, Algeria

Presentation

MLH Local Hack Day by Ingeniums Club

ESI-SBA, Algeria

PRESENTER FOR <DOCKER FROM A TO B>

Dec. 2018

- Introduced the Docker Key Concepts.
- Introduced how to dockerize a Django Web Application.

DevDay2.0 by AlphaBit Club

ESI-SBA, Algeria

PRESENTER FOR <SQL INJECTION>

Dec. 2018

- Introduced SQL Injection describing some attack and defence techniques.
- Conducted a workshop on SQL Injection attack techniques.