

Omar Khodr

French Citizen | +41 79 918 50 09 | omar.khoder2000@gmail.com | Zurich, Switzerland
<https://www.linkedin.com/in/omar-khodr/> | <https://github.com/OmarKhodr>

Professional Experience

Google, Zurich, Switzerland

June 2022 — Present

SOFTWARE ENGINEER

- Working on the Youtube Developer Experience and Productivity team.

Google, Paris, France

June 2021 — September 2021

SOFTWARE ENGINEERING INTERN

- Built an internal debugging dashboard for Google Cloud's Managed Instance Groups (MIGs) that provides insights into VM instance actuations
- Designed and implemented a redesign of a Truth library extension for managed instances by building a generic and fluent assertion model that increases modularity and extensibility while reducing code redundancy

American University of Beirut, Beirut, Lebanon

January 2019 — May 2019, January 2020 — May 2020

PROGRAMMING LAB TEACHING ASSISTANT

- Supported students and lab instructor as a teaching assistant for a Python programming lab

Euro System Arabia, Riyadh, Saudi Arabia

December 2019 — January 2020

SOFTWARE ENGINEER INTERN

- Developed a database application for querying an alarms database protecting critical sites at the national railway company (Saudi Railway Company)
- Refactored legacy system by making it modular and extensible

Education

American University of Beirut, Beirut, Lebanon

September 2018 — May 2022

BE IN COMPUTER AND COMMUNICATIONS ENGINEERING (FOCUS: COMPUTER SCIENCE AND ENGINEERING)

GPA: 87.81

Projects

Python Interpreter

March 2020

- Wrote a context-free language to parse and compute four basic Python list operations: assignment, concatenation, slicing and list comprehension
- Implemented using the ANTLR Java library by writing a lexer to break down the code into tokens and a parser to validate statements and execute the corresponding Java business logic

Code Coverage Analysis [Contribution]

April 2020

- Completed a project skeleton to perform coverage of methods, method call pairs, basic blocks and basic block edges
- Filled the missing parts in order to display the dynamic call graph and to print the percentage of covered methods and basic blocks using ASM, a Java Bytecode manipulation framework

What Do You Think? (WDYT)

September 2021 — May 2022

- Developed an anonymous polling application that queries a sample of the population, then sends them user-generated polls through SMS messages to gauge public opinion
- Implemented homomorphic encryption to perform operations directly on the encrypted poll answers, then decrypt the aggregate poll result without ever revealing the individual answers

Skills

Programming Languages Java, C/C++, TypeScript/JavaScript, Swift, Python, Scala, SQL

Tools and Frameworks UIKit, SwiftUI, Spring Boot, ANTLR, PostgreSQL, MongoDB, Firebase, MATLAB, Git, Linux

Languages Fluent in English, French and Arabic