Francesco Licchelli

Date of birth: 15/03/2002 | **Nationality:** Italian | **Gender:** Male | **Phone:** (+39) 3292677455 (Mobile) | **Email address:** francesco.licchelli15@gmail.com | **Address:** Via Sinni, 19, 75100, Matera, Italy (Home)

WORK EXPERIENCE

05/05/2025 - CURRENT - TURIN, ITALY

JAVA BACKEND DEVELOPER CLUSTER REPLY FINANCIAL SERVICES

Backend development activities on banking-sector projects using Java 17/21 and Spring Boot, within a microservices architecture.

Implementation of both enhancement and maintenance developments, including the creation of unit tests using JUnit and Mockito, and the use of SonarQube for code quality analysis and application metrics monitoring.

Troubleshooting and resolution of application issues through log analysis with Splunk, along with post-release support in production environments.

Interaction with MongoDB for data management and verification.

Use of CI/CD pipelines with Jenkins, version control with Git, and operations across multi-stage environments.

30/10/2023 - 29/11/2023 - BOLOGNA, ITALY

PYTHON DEVELOPER MON5 S.R.L.

University curricular internship at MONS S.R.L., involving the development of two Python applications for OS detection of network devices.

Implementation of both active and passive fingerprinting techniques using Scapy to identify the operating system and its version based on a given IP address.

EDUCATION & TRAINING

09/2016 - 06/2021 - MATERA, ITALY

DIPLOMA IN COMPUTER SCIENCE- IIS G.B. PENTASUGLIA

Field(s) of study: Software and applications development and analysis , Computer use | **Final grade:** 100/100 | **Level in EQF:** 4 | **Address:** Via Enrico Mattei75100 | **Website:** http://www.iispentasuglia.edu.it

09/2021 - 03/2025 - BOLOGNA, ITALY

COMPUTER SCIENCE BACHELOR'S DEGREE- ALMA MATER STUDIORUM - UNIVERSITÀ DI BOLOGNA

During my studies, I built a strong foundation in formal languages, programming, algorithms, and computational complexity.

I gained experience in collaborative team development using Agile/Scrum methodologies and Git-based version control systems. I also worked on Linux system configuration and network setup with a focus on security, as well as on infrastructure and device configuration automation using Ansible.

Additionally, I managed virtual cloud networks on Microsoft Azure and AWS, and developed applications using Java, C, C++, Python, Kotlin, HTML/CSS/JavaScript, React.js, Vue.js, and Node.js, leveraging Docker for containerization.

Field(s) of study: Database and network design and administration , Software and applications development and analysis | **Final grade:** 105/110 | **Level in EQF:** 6 | **National classification:** 6 | **Type of credits:** ECTS | **Number of credits:** 180 |

Thesis: JolieGraph: a tool for communication analysis in Jolie services | **Website:** www.unibo.it

● LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B2	B2	B2	B2	B2

● PROJECTS

07/2023 - 01/2024

Squealer Squealer is a social network on which I worked on both backend and frontend development. For the backend (implemented in Node.js), I designed a scalable architecture using Express and its routing methods, with MongoDB serving as the database. The frontend was divided into three sections: one for users, one for managers, and one for the website administrator. Since Squealer is an educational project, each section was built using different technologies: React.js, Vue, and vanilla HTML/CSS/JavaScript.
Links https://github.com/francesco-licchelli/Squealer

10/2023 - 12/2024

ChessVerse ChessVerse is a website that allows its users to play chess against other players or against an AI. React was used for the frontend, while the backend was implemented in Python, coupled with the Django framework for handling requests and MariaDB for data storage. Docker was used to containerize the services, which were hosted on different virtual machines provided by Microsoft Azure. I implemented the routing between those machines by configuring the Apache web server.
Links https://github.com/papum20/unibo__projects__ChessVerse

06/2023 - 08/2023

Panda+ Panda+ is a UNIX-like kernel written in C for the PandOS operating system. It includes basic operating system functionalities such as processes, namespaces, system calls, interrupts, and exception handling.
Links https://github.com/francesco-licchelli/PandaPlus

10/2021 - 01/2022

Your City Is Listening To YCLIT is an Android application written in Kotlin. It uses APIs such as the Google Maps Platform API and was designed to be as responsive as possible. This responsiveness was achieved by using Jetpack Compose and the MVVM design pattern.
Links https://github.com/francesco-licchelli/YCILT

09/2022 - 01/2023

SufferingDoge SufferingDoge is an AI written in Java. Its goal is to solve MNK configurations by finding the best possible move. It achieves this through a fine-tuned implementation of the Minimax algorithm that employs the alpha-beta pruning technique along with both local and global heuristics to further prune the game tree, thereby allowing for deeper and more comprehensive exploration.
Links https://github.com/francesco-licchelli/SufferingDoge