Augusto Marco Fungo

mail - linkedin - github - web

EDUCATION

Universidad Nacional de Río Cuarto

Río Cuarto, Córdoba, Argentina

Feb 2019 - Apr 2025

Bachelor of Computer Science
• Average score: 8.27 / 10

• Total hours: 3839

Universidad Nacional de Río Cuarto

Río Cuarto, Córdoba, Argentina

Feb 2019 – Nov 2023

Minor in Computer Science

TECHNICAL SKILLS

Languages: Java, Python, C, Haskell, Ruby, Bash, JavaScript, HTML

Web & Backend Development: Spring Boot (JWT security), Flask, Ruby on Rails, REST APIs, JSON, SQL, gRPC

Databases: PostgreSQL, MongoDB

Testing & QA: Unit Testing (JUnit, Pytest, Mockito), Property-Based Testing (Jqwik), BDD (Gherkin), TDD

Data & Scripting: Pandas, Numpy, Bash, Makefile

Tools & DevOps: Git, Docker, Gradle, Maven

Software Design: OOP, MVC, Design Patterns

SOFT SKILLS

- Leadership
- Effective communication
- · Mentoring and knowledge sharing
- Teamwork
- Active listening
- Critical thinking

WORK EXPERIENCE

Student Teaching Assistant

Universidad Nacional de Rio Cuarto, Córdoba, Argentina

06/2021 - 06/2025

- Selected as a top 1 teaching assistant for two years, earning a paid position based on performance and merit.
- Taught and assisted in several computer science courses, including Introduction to Algorithms, Data Structures, Computer Organization, and Advanced Algorithms.
- Provided academic support to students, prepared learning materials, and contributed to course planning.

Clerk

Mas soluciones, Córdoba, Argentina

09/2021 - 03/2025

- Managed communication with suppliers to collect invoices and ensure accurate financial records.
- Handled financial balancing and bookkeeping tasks, maintaining up-to-date records.
- Organized and stored all administrative documents, ensuring efficient data management.

ERP-style Administrative Software

GitHub

Developed a financial management system to handle company finances, integrating data from AFIP for automated balance calculations. Migrated workflows from Excel to a structured database, improving data accuracy and operational efficiency.

Technologies: Java, JUnit

Enhancing jqwik with Automated Object Generation

JqwikOG RandoopOG

Extended the jqwik property-based testing library by integrating automatic object generation using Randoop. Enabled automatic creation of complex test inputs, improving testing coverage and reducing manual effort. *Technologies: Java, jqwik, JUnit*

Distributed Flight Ticketing System

GitHub

Designed and implemented a distributed system for purchasing airline tickets across multiple companies. The system supports route combinations with connections, handling service availability and seat capacity per company via gRPC-based communication. Emphasized scalability and modularity through microservice-style design. *Technologies: Python, gRPC, JSON*

Co-working Space Reservation Platform (Microservices)

GitHub

Microservices-based platform to manage co-working space reservations. The system includes user authentication with JWT, service discovery, and database management across PostgreSQL and MongoDB. Designed to explore modern backend architecture patterns including RESTful APIs and stateless authentication.

Technologies: Java, Spring Boot, JWT, PostgreSQL, MongoDB

Compiler GitHub

A compiler built with Flex and Bison for the language's rules, tokens, and ASTs, with a type-checking algorithm, three-way code generation, and Assembly Code.

Technologies: C, Makefile, bash

LANGUAGES

Spanish: Native proficiency

English: Intermediate (B1). Currently preparing for the IELTS exam to certify English proficiency

EXTRACURRICULAR ACTIVITIES

Faculty and Departmental Government

Río Cuarto, Argentina

Jun 2023 – Jun 2024

Member, Faculty of Sciences and Computer Science Department

Student Volunteering

Universidad Nacional de Río Cuarto

Volunteer in outreach and academic events

2020 - 2024

- RIO 2024, RIO 2023 Computer science summer school
- JUPA University open day for high school students
- Social-community practice Workshop: Introducing the world of databases

Conferences Attended Argentina

- RIO 2025, RIO 2020 Computer science summer school
- ECI 2023 Winter break Computer science school, UBA
- CACIC 2019 Argentina Congress on Computer Science

Advanced Courses and Seminars

Various Argentina

- Introduction to Input Grammar Fuzzing
- Advances in Automatic Software Testing

- Fuzzing for Compiler Testing
- Advanced Data Structures
- Modeling and Analyzing Concurrent Systems
- Routing on the Space Internet
- Software Testing