

# MARTINA BAIARDI

## Research Fellow

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📍 Cesena, Italy

🌐 github.com/anitvam

## EDUCATION

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M.Sc. in Engineering and Computer Science

📅 2020–2023

📍 Cesena, Italy

**University of Bologna**

110L/110

Thesis: JACOP: Programming BDI Agents with Pluggable Concurrency Model

Supervisor: Giovanni Ciatto

Co-Supervisors: Andrea Omicini, Jomi F. Hübner

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Curricular Internship

📅 03–05/2020

📍 Cesena, Italy

**University of Bologna**

Study of a Kubernetes cluster: main aspects, tools and realization of a cluster on virtual machines

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B.Sc. in Engineering and Computer Science

📅 2017–2020

📍 Cesena, Italy

**University of Bologna**

110L/110

Thesis: Kubernetes cluster autoscaling and management: a case study

Supervisor: Vittorio Ghini

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Accounting degree in Business Information Systems

📅 2017

📍 Cesena, Italy

**ITE "R. Serra"**

100/100

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## RESEARCH CONTRACTS

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Research Scholarship for hardware system management within the StairwAI project

📅 01–07/2023

📍 Cesena, Italy

**DISI - University of Bologna**

Supervisors: Andrea Borghesi, Giovanni Ciatto

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## TEACHING

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Tutor for the course "Programmazione ad Oggetti"

📅 A.Y. 2022/2023

📍 Cesena, Italy

**DISI - Laurea in Ingegneria e Scienze Informatiche**

Supervisor: Mirko Viroli

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Tutor for the course "Sistemi Virtualizzati"

📅 A.Y. 2021/2022,  
A.Y. 2022/2023

📍 Cesena, Italy

**DISI - Laurea in Tecnologie dei Sistemi Informatici**

Supervisor: Vittorio Ghini

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Tutor for the course "Metodi Numerici"

📅 A.Y. 2021/2022

📍 Cesena, Italy

**DISI - Laurea in Ingegneria e Scienze Informatiche**

Supervisor: Lucia Romani

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## PREVIOUS WORK EXPERIENCE

### Web Developer

#### Blockvision

Work done during the studies

2020–2022

Cesena, Italy

### Waitress

#### Il Localino

Work done during the studies

2019–2021

Gambettola, Italy

### Bartender

#### Rockin Park

Work done during the studies

Summer  
2017–2019

Cesena, Italy

### Wardrobe Attendant

#### Vidia Club

Work done during the studies

Winter  
2016–2019

Cesena, Italy

## PROFESSIONAL SKILLS

### Programming Languages

Kotlin, Java, Scala, Javascript, C, Bash, Python, PHP, Sql, Prolog, C#, C++

### Other Languages

Markdown, YAML, L<sup>A</sup>T<sub>E</sub>X, HTML, CSS, XML, JSON

### Technologies

Git, Docker, Kubernetes, Ansible, Android, Vue, Spring, Jacamo, Jason

### Programming Paradigms

Object Oriented Programming, Functional Programming, Agent Oriented Programming, Logic Programming, Event Driven Programming, Imperative/Procedural Programming

### Project Management

Scrum, Agile

## PORTFOLIO

### JaKtA

[github.com/jakta-bdi](https://github.com/jakta-bdi)

10/2022–03/2023

Jason-like Kotlin Agents (JaKtA): a Kotlin internal DSL meant to seamlessly integrate BDI agents into a mainstream programming language, thus adding AOP to Kotlin as an additional paradigm, retaining its toolchain, libraries, and OOP/FP abstractions. The project was made for academic purposes for the “Intelligent System Engineering” course and then extended for the Master Degree Thesis.

Paper submitted for publication to PAAMS 2023 conference

**Language:** Kotlin

**Keywords:** Domain Specific Language, Gradle Multi-Project, Domain Driven Design

### Smart Waste Collection

[github.com/SmartWasteCollection](https://github.com/SmartWasteCollection)

[smartwastecollection.github.io/documentation](https://smartwastecollection.github.io/documentation)

04–10/2022

The aim of the project was to optimize the management of waste collection using **Digital Twins** over a simulated environment. The project was made for academic purposes for “Laboratorio dei Sistemi Software” and “Pervasive Computing” courses.

**Language:** Kotlin

**Keywords:** Digital Twins, Microservices, Azure Cloud, CI/CD, Domain Driven Design

## Smart Subway

01-02/2022

The objective was to create a smart system for the management and monitoring of metropolitan stations. The topic was used for the development of two projects for two different Master Degree courses: the first was “Smart City e Tecnologie Mobili” course regarding an implementation using AWS technologies, the second was “Project Management” course to carry out all Project Management Lifecycle phases.

**Keywords:** AWS Cloud, IoT, RFID

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## Bunny Survival

 [github.com/anitvam/pps-bunny](https://github.com/anitvam/pps-bunny)

08-10/2021

An open-source simulator of a bunny population made for academic purposes under the course “Paradigmi di Programmazione e Sviluppo” inspired from the interactive simulator Natural Selection developed by University of Colorado.

**Language:** Scala

**Keywords:** Scrum

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## Ca' Foscari Jisho

 [jisho.unive.it](https://jisho.unive.it)

05-07/2021

Web application for italian-japanese translations made for academic purposes under the course “Applicazioni and Servizi Web” in collaboration with the research group EDRDG of **Ca' Foscari University** in Venice, Italy.

**Keywords:** Vue, Docker, Ansible, Javascript, Agile

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# INTERESTS

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Kubernetes

CI & CD

Microservices

User Experience and User Interface

Design

Photography

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