# Leonardo Balzoni

## Software Engineer

<u>https://leobalzoni.github.io/BalzoniPortfolio/</u> www <u>https://www.linkedin.com/in/leobalzoni</u> in <u>https://github.com/LeoBalzoni</u> git I.balzoni@gmail.com (+39) 338-1226554 ፟፟፟

People and solution-oriented Software Engineer, with a strong foundation in algorithm design, machine learning, neural networks and data modeling.

# EXPERIENCE

Nexthink, Lausanne (CH) - Machine Learning Software Engineer (Full-stack)

December 2020 - Present

- In the process of building from the ground up a service that uses AI to determine the root-cause of issues that Nexthink customers might face. (React, Java, Clickhouse)
- Also covering the role of scrum master of the team I'm in.

Jpanik s.r.l., Rome (IT) - Junior Software Engineer

October 2017 - August 2018

- Responsible for the daily development of a full-stack application that managed the logistics of hospital structures: shifts optimization, ward management, billing, etc. (Java, AngularJS)
- Conceptualized, planned, and developed the requisites of the application while managing the clients' needs and expressing ideas with the senior stakeholders.

## **EDUCATION**

#### Università La Sapienza, Rome (IT) - Master's in Computer Science Engineering

October 2018 - January 2021

- Graduation score: 110/110 Magna Cum Laude, Grades average: 29.3/30.
- Relevant coursework: Algorithm Design, Machine Learning and NNs, Data Mining, Web Information Retrieval, Human-Computer Interaction, Data Management, Mobile development.
- Master's thesis: A reliability analysis tool based on word embedding and convolutional NN.

Università Roma Tre, Rome (IT) - Bachelor's in Software Engineering

November 2014 - February 2018

- Graduation score: 107/110.
- Thesis: "Development of an application for the logistic management of a hospital structure"

#### SKILLS

Fluent in Java, JavaScript, Python, HTML, CSS, React, AngularJS and NodeJS. Proficient in SQL, Django, Lua, AWS and OpenGL. Good background in Windows/Linux environments. Great problem-solving skills, well aware of Agile methodologies (Scrum), thorough knowledge of data structures, version repositories, web APIs and web services. Communication and collaboration skills.

## PROJECTS

**NYCVA** - Created a visual analytics toolkit to gather insights about housing in New York City. I built multiple visualizations that provided interaction between them and were empowered by data mining methods such as PCA or RFR. The tool was developed in Javascript with the aid of D3.js. *Tool / Code* **Sound Source Localization with Quaternion NN** - Used to solve the tasks of Sound Event Detection and Direction of Arrival of overlapping sounds in reverberant environments. Utilized quaternion layers and short-time quaternion Fourier transforms to encode the features to improve training time. *Code* **Other** - See my other projects such as a text spam detector, a 24 class boat classification on Venice's Grand Canal, or a pathfinder algorithm visualizer on my portfolio website.