

# Thomas PELLEGRINI

## Data Engineer

@ pellegrinithomas1@gmail.com  
thomaspellegrini.com 📍 Italy

in linkedin.com/in/ThomasPellegrini

github.com/ThomasPellegrini

## EDUCATION

- 2018 - 2021 **Master's Degree in Computer Science, University of Milan - Bicocca**  
- Thesis on the automatic generation of test cases to validate enforcers for Android apps.  
- *Relevant Coursework* : Cloud Computing, Internet of Things, Software Architecture.
- 2015 - 2018 **Bachelor's Degree in Computer Science, University of Milan - Bicocca**  
- Thesis on the development of a cross-platform application with React Native and Redux that delivers campus news.

## EXPERIENCE

- Ongoing  
03/2021 **Data Engineer, QUANTYCA - DATA AT CORE, Monza, Italy**
- Proficient in all facets of Business Data Analysis, Data Modelling and ETL flows development using Pyspark.
  - Gained solid technical expertise in Software Development Lifecycle implementing Backend solutions with core Java technologies as SpringBoot and Frontend frameworks using JavaScript, ReactJS, Redux, HTML5 and CSS.
  - Responsible for the development of automatic processes designed to speed up the data entry process by 50%.
  - Responsible for refactoring existing AWS workflows using shared success and fail jobs reducing the amount of allocated resources by 20%.
- AWS Pyspark React Spotfire Springboot

## SKILLS

- Languages** Python, PySpark, Javascript, Java  
**Frameworks** React, React Native, Spring Boot, Django  
**Databases** MySQL, Oracle, Redshift, IBM DB2  
**Other** Git, Scrum, AWS, Docker

## LANGUAGES

- **Italian** : Native
- **English** : Proficient

## + CERTIFICATIONS

- **AWS** Cloud Practitioner
- **Tibco** Spotfire Professional

## PROJECTS

### TEST4ENFORCERS (ANDROID)

- Built tool for automatic generation of test cases for software enforcers that can be used to modify the runtime behavior of Android applications to guarantee that relevant correctness policies are satisfied more than 90% of the time.

Python Networkx Android Studio Genymotion

### IOT BASED SMART WEATHER STATION

github.com/ThomasPellegrini/Smart-Home-IoT

- The goal of this project is to make a temperature/humidity/ambient light/rssi monitor that wirelessly logs the values to a remote server.
- This system can be controlled with a Telegram bot and a web client.

C++ Python NodeMCU MySQL MQTT protocol Telegram bot

### REACT NATIVE NEWS APP

github.com/ThomasPellegrini/University-News-App

- React Native news app that displays news articles from Bicocca University.

React Native Javascript Redux

### SORTING VISUALIZER

github.com/ThomasPellegrini/SortingVisualizer

- React application for visualizing sorting algorithms (Merge Sort)

React Javascript Webstorm