




# Tiago Santos

Software Engineer

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   [tvcsantos](https://www.youtube.com/tvcsantos)

## WORK

### Software Engineer

Mercedes-Benz Portugal | 2019 - Present

Main programming languages used: Java, SQL, Kotlin

Other technologies & frameworks used: Spring, PCF, AWS, Jenkins, SonarQube, Docker, K8s, Jira, Confluence, Bitbucket, GitHub

### Software Engineer

Affinity @ Collab, Collab | 2016 - 2017, 2017 - 2019

Back-end engineering work on the main product, an IP-based multimedia contact center solution.

Main programming languages used: C#, SQL

Other languages, tools & frameworks used: Java, C++, C, JavaScript, TypeScript, Angular4, Microsoft Azure & Azure DevOps

### Research Assistant

NOVA School of Science and Technology | 2009 - 2016

Worked on static analysis techniques for automatic program verification during application development of imperative programs with data structures and aliasing.

Advisor: Prof. Luís Caires.

### Teaching Assistant

NOVA School of Science and Technology | 2009 - 2016

Lectured courses on programming languages and computational logic for computer science students and other engineering students.

## EDUCATION

### Advanced Studies in Computer Science

Programming Languages Specialization

NOVA School of Science and Technology | Portugal

2010 - 2016

FCT - MCTES Scholarship

### MSc in Computer Science

NOVA School of Science and Technology | Portugal

2008 - 2010

GPA: 18/20

### BSc in Computer Science

NOVA School of Science and Technology | Portugal

2005 - 2008

Merit Scholarship | 2005 - 2006

GPA: 17/20

## SOFT SKILLS

- Good Communication
- Critical Thinking
- Teamwork & Collaboration
- Problem Analysis and Solving
- Self-driven & Motivated
- Quick Learner

## HARD SKILLS

### Programming Languages

C#, Java (Expert)

Kotlin, Scala, OCaml, C++  
JavaScript, SQL (Proficient)

Python, TypeScript (Intermediate)

### Tools & Frameworks

SMT - Z3, SVN, Git, LaTeX  
HTML, XML, CSS, Arduino  
Angular4, Vue.js

## PROJECTS

### Pulse

An Arduino ultrasonic parking sensor  
<https://tvcsantos.github.io/pulse>

### FunSpec

Functional specification assertion language for static program verification  
<https://tiago.santos.com.pt/funspec>

### ImProVe

Automatic static imperative program verification  
<https://tiago.santos.com.pt/improve>

### SpecJava

Java compiler type system extension with lightweight static logical assertions  
<https://tvcsantos.github.io/specjava>

## INTERESTES

- Walking & Nature
- Music, Movies & TV Shows
- Electronics, Robotics & Automation
- Do it yourself (DIY)

## LANGUAGES

- Portuguese (Native)
- English (Professional)