

# Tiago Gomes Castro

Brazilian, 37 years old

Actually living in Porto, Portugal

Email: [tiagogomes.ti@gmail.com](mailto:tiagogomes.ti@gmail.com)

Linkedin: <https://www.linkedin.com/in/tiagogomescastro>

GitHub: <https://github.com/tiagogomesti>

## Degree

- Teleinformatics Engineering with Emphasis at Computers Systems  
Conclusion: 2015.2  
Federal University of Ceará (UFC)  
Degree validated in Portugal under 220230069052 registration number. It can be checked at <https://www.dges.gov.pt/RecOn/Validacao>

## Courses

- **October/2023**  
TESSY 4  
Workload: 20h  
Provider: Hitex Embedded Tools & Solutions  
Certificate Link: <https://bit.ly/Tessy-4-Certificate>
- **October/2023**  
Functional Safety Training - Modules 1 and 4  
Workload: 16h  
Provider: TÜV SÜD Rail GmbH  
Certificate Link: [https://bit.ly/FuSa\\_Training](https://bit.ly/FuSa_Training)
- **May/2018**  
Embedded Systems - Shape The World: Micro controller Input/Output  
Workload: 40 hours  
Provider: EDX  
Course Link: <https://www.edx.org/es/course/embedded-systems-shape-the-world-microcontroller-inputoutput>
- **February/2016**  
Introducing of Embedded Linux  
Provider: Professor at University of Nice Sophia-Antipolis (<https://www.linkedin.com/in/luc-deneire-7116051>)

- **September/2010**  
VHDL Language  
Workload: 20 Hours
- **July/2010**  
Object Oriented Programming using Java  
Workload: 40 Hours.

## Professional Experience

- **July/2023 - Actually:** Intellias
  - **Location:** Porto - Portugal
  - **Position:** Strong Middle Embedded Engineer
  - **Website:** <https://intellias.com/>
  - **Main Activities:**
    - Automotive Embedded - Ultrasonic sensors
      - Detail Design
      - Development
      - Unit Test
- **November/2021 - July/2023:** Capgemini Engineering
  - **Location:** Porto - Portugal
  - **Position:** Professional B2 Engineer
  - **Website:** <https://www.capgemini-engineering.com>
  - **Main Activities:**
    - Automotive Embedded - HMI Domain
      - Team technical leader
      - Detail Design
      - Development
      - Unit Test
    - Automotive Embedded Development - Powertrain Domain
      - Team technical leader
      - Development
      - Unit Test
    - Project Benches Maintainer
- **January/2021 - October/2021:** Systronix
  - **Location:** Fortaleza/Ceará - Brazil
  - **Position:** Firmware Developer

- **Main Activities:**
  - Firmware development to traffic speed measurement devices
  - FREERTOS Firmware development to a STM micro controller
  - Digital signal processing to interpret voltage signal from ADC micro controller interface
- **September/2019 – January/2021: Eletra Energy Solutions(Hexing Group)**
  - **Location:** Fortaleza/Ceará – Brazil
  - **Position:** Firmware Analyst
  - **Website:** <http://www.eletraenergy.com>
  - **Main Activities:**
    - Porting from LoRaWAN library to a NiC(Network interface card) interfacing SX1276 LoRa transceiver and STM32l071cz micro controller
      - Interfaces used in this work: RTC, SPI, UART, Timers, Interrupts, DMA, I2C
    - Used Cosem/DLMS protocols to interface NiC with Electric Smart Meter
- **April/2017 – September/2019: Atlanta Information Technology**
  - **Location:** Fortaleza/Ceará – Brazil
  - **Position:** Firmware Developer
  - **Website:** <https://www.atlantatecnologia.com.br>
  - **Main Activities:**
    - Used digital signal processing methods to interpret a RLC circuit aiming to measure vehicle speed
    - Firmware developing using PIC18F micro controller
- **May/2016 – March/2017: INPE – National Spacial Research Institute**
  - **Location:** Fortaleza/Ceará – Brazil
  - **Position:** Model Based Designer – CNPQ Internship
  - **Website:** <https://www.gov.br/inpe/pt-br>
  - **Main Activity:** Development and implementing, on Xilinx FPGA device, a system to process messages of Brazilian Spacial Data Collect program
- **February/2014 – September/2015: LESC – Computing Systems Engineering Laboratory**
  - **Location:** Fortaleza/Ceará – Brazil
  - **Position:** Firmware Developer.
  - **Website:** <http://site.lesc.freeddns.org/>

- **Main Activity:** Firmware development of a core used to signal processing of analogical telephony system. The code was written in assembly language of proprietary softcore processor made by Siemens.
- **July/2010 – December/2013: LESC – Computing Systems Engineering Laboratory**
  - **Location:** Fortaleza/Ceará – Brazil
  - **Website:** <http://site.lesc.freeddns.org/>
  - **Position:** R&D Internship.
  - **Main Activity:** Research and Development in Networking on Chip (NoC) using VHDL and C as developing languages

## Hard Skills

- Experience in C Embedded Development
- Beginner/Intermediary in C++ Development
- Python Language to write tests scripts when necessary
- CMake
- Intermediate knowledge in FREERTOS
- Operational Systems: Linux and Windows.
- ARM Architecture
- STM32 ARM based Micro Controllers
- PIC Micro Controllers
- Git versioning
- SVN versioning
- Laboratory measurements equipments handling (Oscilloscope, Signals generator, Multimeter, etc...)
- English Level: B2

## Soft Skills

- Problem-solving
- Teamwork
- Leadership
- Attention to detail
- Time management
- Interpersonal Skills

# Extracurricular Experiences

- **October/2014**  
Instructor: VHDL Course  
Workload: 12 Hours.
- **November/2013**  
Instructor: VHDL Course  
Workload: 14 Hours.
- **August/2013 – November/2013**  
Teaching Assistance: Computer Systems
- **April/2013 – November/2013**  
Teaching Assistance: Digital Electronic
- **April/2013 – July/2013**  
Teaching Assistance: Microprocessor Systems
- **October/2013**  
University meetings 2011 – Federal University from Ceará  
Work: THOR: A network intra chip for real time systems  
Link to resume: <http://sysprppg.ufc.br/eu/2011/Resumos/wrappers/MostrarResumo.php?cpf=44100353391&cod=002>  
Participated as Co-Author
- **October/2013**  
University meetings 2011 – Federal University from Ceará  
Work: Simulation of intra chip networks using OMNET++  
Link to resume: <http://sysprppg.ufc.br/eu/2011/Resumos/wrappers/MostrarResumo.php?cpf=44100353391&cod=003>  
Participated as Co-Author
- **October/2013**  
University meetings 2011 – Federal University from Ceará  
Work: Generator environment and analysis of intra chip network traffic  
Link to resume: <http://sysprppg.ufc.br/eu/2011/Resumos/wrappers/MostrarResumo.php?cpf=44100353391&cod=004>  
Participated as Co-Author