

Federico Cocconcelli

Nationality: Italian

CONTACT



ABOUT ME

I have always described myself as a curious person that likes to learn new things and to improve his skills. For this reason, I have many passions that embrace a variety of fields and I always watch for new experiences.

Both in personal and professional life, I strongly believe that teamwork, good communication and organization are key factors to create valuable outcomes when collaborating.

PROFESSIONAL EXPERIENCE

01/11/2018 – CURRENT

Ph.D. in Information technologies

University of Parma

Thesis title: IoT systems for unobtrusive monitoring of physical activity and vital signs.

My research activities focused on the development of IoT solutions for healthcare and wellbeing.

Areas of expertise:

- C, Python, MATLAB programming
- Firmware developing for STM 32bit MCU (ARM based)
- I²C and SPI protocols
- TCP based MQTT and TLS protocols
- Machine Learning
- Circuits and filters design
- Digital Signal Processing algorithm
- Use of laboratory instruments (oscilloscopes, multimeters, power supply units)

During my Ph.D. I have carried out other related activities:

- Published 9 articles
- Attended 2 conferences
- Coordinated a group of students to design, develop and test a smart floor for the PLEINAIR project ([project's video](#)).

01/11/2018 – 31/01/2022

Academic tutor - University of Parma

University of Parma

I have followed numerous students during their master's thesis.

I have done tutor activity for teaching support for the following disciplines:

- Electronic 1
- Laboratory of electronics for the Internet of Things
- Electrotechnics

EDUCATION AND TRAINING

01/10/2015 – 12/10/2018

Master's degree in Electronic Engineering - Final grade: 110/110 cum laude

University of Parma

Design and development of an IoT system for heart rate monitoring through the use of MCU, accelerometric sensors and the MATLAB environment.

01/09/2011 – 19/03/2015

Bachelor's degree in Computer, Electronic and Communications Engineering - Final grade: 108/110

University of Parma

Automation of a test bench to test SMD solder joints through thermomechanical stresses. I have employed the LabVIEW programming environment, thermography maps and the SolidWorks software.

LANGUAGE SKILLS

MOTHER TONGUE(S): Italian

OTHER LANGUAGE(S):

English

Listening
C1

Reading
C1

Spoken
production
C1

Spoken
interaction
C1

Writing
C1

CONFERENCES AND SEMINARS

> Online conference

2021 IEEE International Workshop on Metrology for Industry 4.0 & IoT (MetroInd4.0&IoT)

Paper presented: [An accurate and stable bed-based ballistocardiogram measurement and analysis system](#)

> University of Essex, Colchester, United Kingdom

2019 11th Computer Science and Electronic Engineering Conference (CEEC)

Paper presented: [Seismocardiography-based detection of heartbeats for continuous monitoring of vital signs](#)

PUBLICATIONS

Pubblications

All my publications can be found at my [Google scholar profile](#)

DIGITAL SKILLS

Suite Office (Excel Word Ppt) / Basic knowledge of HTML, CSS, PHP, Javascript

I authorize the processing of personal data contained in my curriculum vitae based on art. 13 GDPR 679/16.