# Domenico Natella
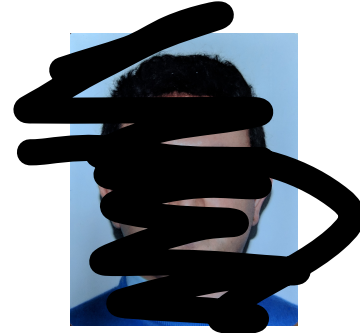# Curriculum Vitæ
# Updated February 1, 2019

## Working experience

April 2018 – November 2018
**Research Fellow** at the University of Sannio (Benevento, Italy). Research topic: *modeling and energy management for hybrid electric vehicles.*
Advisor: prof. Francesco Vasca

## Education

December 2018 – present
**Ph.D. Student in Information Technologies** at the University of Sannio (Benevento, Italy).
Research topic: *hardware in the loop for electronic control units in hybrid vehicles.*
Advisors: prof. Luigi Iannelli and prof. Francesco Vasca.

February 2018
**Master's degree in Computer Engineering** at the University of Sannio (Benevento, Italy) *cum laude.*
Thesis title: *"Indoor positioning and supervision of autonomous agents using Arduino and Raspberry".*
Advisor: prof. Francesco Vasca.

March 2016
**Bachelor's degree in Computer Engineering** at the University of Sannio (Benevento, Italy).
Thesis title: *"Development of mobile applications for public utility based on OpenData".*
Advisor: prof. Gerardo Canfora.

## Languages

Italian (mother tongue)

English (intermediate)

## Technical skills

Programming languages: Java, C, Python, Assembly, Verilog, CAPL for CANoe/CANalyzer, Java for Android, Swift, Wiring, nesC, Matlab/Simulink, SQL. Version control: Git.
Integration testing: Travis CI.
Amazon EC2, S3. LaTeX.

## University projects

May 2017
A radio-controlled competition model was modified by replacing the original combustion engine with a purely electric traction. The required acceleration was limited based on a threshold logic on the state of charge of the battery, to ensure greater autonomy of the vehicle. (https://youtu.be/4-PcnCmEKHg)

July 2017
Development of a distributed system able to manage a taxi fleet through the geographic coordinates received by the **Android** devices installed on board the vehicles.

December 2016
Development of a parallel algorithm aimed at calculating implied volatility through the **MPI** and **OpenMP** libraries.

July 2016
Development of an indoor positioning system using a wireless sensor network via Zolertia Z1 and Pololu Mini-IMU v2.

December 2015
Positioning of a marker in an indoor environment using the **OpenCV** library for Java.

## Other activities

September 2017
Participation in the **iOS Foundation Program** held by the University of Sannio in partnership with Apple.

January 2015 – present
IEEE Member
IEEE Vehicular Technology Society Membership

January 2019
Reviewer for:

- IEEE European Control Conference'19
- IEEE Control Systems Letters 2019

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