

# STMicroelectronics and Politecnico di Milano: Innovate for the "Internet of Intelligent Things"

26 March 2020 from 8:30 to 17:30

Aula De Donato, Building 3 - Ground Floor Piazzale Leonardo da Vinci, Milano

STMicroelectronics is pleased to launch Technologies and Systems Days, a series of events to foster collaborations and exchanges between Industry and Academia. These events give researchers the opportunity to share with students their latest developments on emerging technologies topics that include, but are not limited to, artificial intelligence, next-gen sensors, and innovative platforms.

This edition entitled Innovate for the "Internet of Intelligent Things" is organized in collaboration with the Department of Electronics, Information and Bioengineering of Politecnico di Milano and includes:

- Keynotes by world-renewed innovators
- Talks with researchers and developers from ST and Politecnico di Milano
- An exhibition area where to see live demonstrations and prototypes of research projects
- A testimony of an internship experience in ST.

The event is addressed to academics at all levels, including PhD and MSs students, with the aim of stimulating their innovative potential with the IoT throughout concrete experience and projects.

## **MORNING SESSION**

# 08.30 REGISTRATION OPENING

#### 09.00

## WELCOME

Introduction

Alessandro Cremonesi, STMicroelectronics

#### 09.40 KEY NOTE 1

Transforming (with) Arduino

Fabio Violante, Arduino CEO

### 10.30

#### **SESSION 1: Embedded Systems**

Introduction to STM32duino and Arduino libraries for ST components **Carlo Parata**, STMicroelectronics

Runtime Design Space Exploration and Mapping of DCNNs to Hardware Accelerators

Cristina Silvano, Politecnico di Milano

## 11.10

#### **COFFEE BREAK**

## 10.30

## **SESSION 1: Embedded Systems**

IOTA Distributed Ledger Technology for STM32-based IoT Devices **Antonio Vilei**, STMicroelectronics

Transparent and future-proof security for IoT **Gerardo Pelosi**, Politecnico di Milano

## 12.10 TESTIMONIAL

#### The internship experience in STMicroelectronics

Diego Stucchi, Politecnico di Milano

## **AFTERNOON SESSION**

#### 12.30

#### **LUNCH IN THE EXHIBITION AREA**

#### 14.10

#### **KEY NOTE 2**

Impact of MEMS Technology on IOT **Bruno Murari**, ST Scientific Advisor

## 15.00

#### **SESSION 2: MEMS Technology**

Recent advances of MEMS technology, devices and systems at PoliMi **Andrea Lacaita**, Joint Research Center ST — PoliMI

3D Sensing: applications, technologies and researches **Daniele Caltabiano**, STMicroelectronics

### 15.40 COFFEE BREAK

### 16.00

#### **SESSION 3: MEMS Technology**

Structural Health Monitoring: a cross point among different cultures **Alfredo Cigada**, Politecnico di Milano

Methods for Measuring Time-of-Flight with Piezoelectric Micromachined Ultrasonic Transducers

Marco Passoni, STMicroelecronics

Sleep monitoring systems in home environment **Valeria Radicioni**, STMicroelectronics

# 17.00 CLOSING REMARKS

