## **BOOTCAMP 2023**



# IOT & AI FOR SUSTAINABLE GLOBAL HEALTH AND WELLBEING





#### Bootcamp Scientific Director Prof. Leandro Pecchia

#### WHAT IS THE BOOTCAMP?

An intensive 3-week programme of **lectures**, **labs and project work** to acquire technical skills and soft skills based on **industry use cases**. Tutoring and teamwork are essential parts of this team learning journey.

#### WHERE IS THE BOOTCAMP?

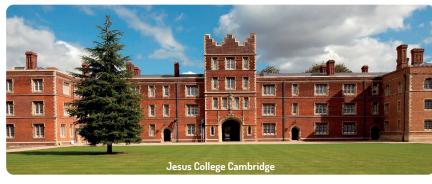
The Bootcamp is be a **full-immersion experience** held at **Jesus College at the University of Cambridge**. This prestigious location allows participants to be in the centre of Cambridge close to all amenities.

#### WHAT ARE THE LEARING OUTCOMES?

By the end of the Bootcamp, participants will be able to:

- Apply the main tools and methos of IoT and AI to real industry use cases
- Work in a diverse group of people to ideate, develop and present a solution to industry partners
- Improve and use their soft-skills in terms of team work, presentation skills and effective communication

#### A full-immersion experience learning by doing together.



#### **PROGRAMME**

Designed in collaboration with academics and professionals, this is a short and effective **3** week course based on experiential learning and practical activities.

#### WEEK 1

loT Fundamentals and Enabling Technologies

#### WEEK 2

Artificial Intelligence Fundamentals

#### WEEK 3

Hackathon

#### The 120 hour programme includes:

Tech Lectures (IoT & AI)
Tech Labs with tutors

Team Project Work
Transferable Skills Training

Business Lectures
Al and Ethics



#### **Academic Tutors**

Guide all the labs after each lecture to ensure participants' learning





#### Transferable Skills Training

Communication and presentation skills, project management, leadership and teamworking skills;



#### **Industry Tutors**

Help the teams with their work to ensure the successful completion of projects



#### **Business Studies**

Benchmarking and Business Modelling.

#### **ENTRY REQUIREMENTS**

The Bootcamp is designed for **students**, **researchers and professionals** who want to have a **multi-disciplinary experience** and **want to acquire loT and Al skills** in close contact with industry partners. To enrol in the Bootcamp, participants must have:

B2 level or higher of English

 basic computing skills and familiarity with at least one programming language.

#### **INDUSTRY USE CASES**

We believe in **project-based learning**. The programme is entirely built on use cases provided by our industry partners. Participants work in teams to find **innovative solutions to real problems**.



#### Software and hardware longevity: using Al to lengthen the lifecycle of equipment and digital systems

Artificial intelligence is a key element that comes to the aid of managing complex systems and supports the optimization of industrial processes. Exploring different designs is essential to ensure systems' longevity and sustainability.



### Al-based health, mental and wellness longevity platform for elderly population

Developing an Al-based health and wellness platform that integrates personalized health coaching, mental health support, and proactive health risk assessment using data from IoT devices such as Fitbit with a particular focus on Silver economy.



## ENAV connect - beyond digital walls and paper-waste

Reshaping the human-machine-interface (HMI) of air traffic controllers' mobile application, releasing full hardware and software potential of modern smartphones.



#### Al Platform for Empowering Family Caregivers to Ensure the Safety and Wellbeing of Vulnerable Groups

Empower family caregivers to proactively supervise the safety and wellbeing of vulnerable groups, such as children and elderly parents, by leveraging a solution that integrates data from daily activities.

#### **PITCH DAY**

During the final **Pitch Day** on the 8th September each team will present their solution to a **Jury Panel** of industry experts. The team presentations will be followed by a formal **Gala Dinner** and the **Award Ceremony**. The winning team will be awarded a **€ 1.000** prize donated by Campus Bio-medico University of Rome.

#### **FACULTY**



PAOLO BENANTI
Professor of Moral
Theology, Bioethics and
Neuroethics at the University of Gregoriana



SALMAN HALEEM School of Engineering Warwick University



ALEXANDRE KABLA
Department of Engineering,
University of Cambridge



**PIETRO LIÒ** Computer Science, University of Cambridge



**LEANDRO PECCHIA**Biomedical Engineering,
UCBM and Warwick
University



**GERAINT WYN STORY** Transferable Skills Training, Cambridge Associates

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**CLAUDIA PEVERINI**Programme Director
University of Cambridge

#### **COSTS**

	UCBM	Partners	Regular
Course only	€ 2.000,00	€ 2.250,00	€ 2.500,00
All inclusive	€ 3.900,00	€ 4.250,00	€ 4.500,00

#### **SCHOLARSHIPS**

If you are interested in applying for a scholarship, please contact us to **request the Scholarship Guidelines** at bootcamp@unicampus.it.

We particularly welcome applications from international participants and women in STEM.

**PARTNERS** 











IN COLLABORATION WITH









