University of Messina
MIFT Department
Bachelor Data Analysis

UNIME Internship Project Proposal

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Project Supervisor

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Project Co-Supervisor (not compulsonary)

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Job Position	PhD Student
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Internship Project Details

Title	Automatic deployment of micro-services on Edge devices
Detailed Description: The growing number of IoT devices in Smart Cities poses challenges of system scalability but also of environmental sustainability. However, the sensors placed in cities make it possible to collect data and create services for citizens. In order to safeguard the environment and optimize the deployment of services, the internship proposes to contribute to the development of an automatic deployment system of micro-services on Edge devices. The project foresees that, starting from a user request, a micro-service can be deployed on an already active Edge device. A Cloud system will allow you to assemble a configuration file in which to enter (according to a standard) user requests and the information necessary for deployment. The Edge device will read the received file and will have to automatically deploy a micro-service according to the directives received. The student will choose which element of architecture to work on based on their needs and/or preferences.	
Duration (months – max 12)	12
Duration (hours)	60
Potential deadline	
Number of open position	5

Internship Skills

Required skills: Linux systems, knowledge of computer networks and programming

Other skills	Python language