Cooperative Agreement Regarding Double Doctoral Education in European Joint Doctorate "Dynamic Wearable Applications with Privacy Constraints" (A-WEAR)

between

Faculty of Automatic Control and Computers University Politehnica of Bucharest

and

Department DIIES Università degli Studi Mediterranea di Reggio Calabria

ARTICLE 1 - INTRODUCTION

University Politehnica of Bucharest (hereafter UPB), Romania and Università degli Studi Mediterranea di Reggio Calabria (hereafter URC), Italy have recognized their mutual interests in research and in the development of doctoral training in the field of Electronics, Computers and Communications Engineering and wish to specify the terms under which students from both universities may be admitted to a jointly implemented doctoral education in the doctoral programs of Computers and Information Technology at UPB and Information Engineering (Ingegneria dell'Informazione) at URC. The registered students shall be granted, upon successful fulfilment of all requirements for graduation from the corresponding doctoral programs at each university, a double degree consisting of the doctoral degree and the official degree certificate from each university.

This Cooperative Agreement defines the terms for implementing the double degree doctoral education in Dynamic Wearable Applications with Privacy Constraints the rights and responsibilities of both parties and the requirements of UPB and URC regarding the education.

The aim of this Cooperative Agreement is to deepen the collaboration in the doctoral education and to build a base for a double degree doctoral programme.

UPB offers Doctor of Philosophy – PhD - degree for candidates having a master degree or equivalent. The PhD education at UPB refers to 180 ECTS of graduate work beyond the master's degree and a thorough research work leading to innovative results and several peer-reviewed publications, from which at least 3 articles in ISI indexed journals or

conference proceedings. The PhD student must attain status as a doctoral candidate by satisfying the UPB specific degree requirements in the student's field. The student must prepare a doctoral dissertation and successfully defend the Dissertation before a Dissertation Committee formed by at least two external evaluators and one internal evaluator. There is no strict minimum limit to the residency at UPB, but in general the portion of work and studies carried out at UPB needs to be considerable.

URC offers Doctor of Philosophy – PhD - degree for candidates having a master degree or equivalent. The PhD education at URC refers to 180 ECTS of graduate work beyond the master's degree and a thorough research work leading to innovative results and usually peer-reviewed publications. The PhD student must attain status as a doctoral candidate by satisfying the URC specific degree requirements in the student's field. The student must prepare a doctoral dissertation, get it pre-approved by two external pre-examiners, chosen in accordance to URC regulations, and successfully defend the Dissertation before a Dissertation Committee formed by three external evaluators. There is a minimum limit to the residency at URC of 12 months, thus the two units will strive to have at least 12 months secondments to the Host University, aiming at an equal amount of time spent in both universities, when possible.

ARTICLE 2 - AIMS AND LEARNING OUTCOMES

The double degree doctoral education aims at producing top-level researchers and professionals for the growing field of Electronics, Computers and Communications Engineering by combining the special expertise of the laboratories associated to the Faculty of Automatic Control and Computers at UPB and the laboratories in the area of ICT associated to the Department DIIES at URC. The main objective of double degree doctoral program is to prepare top-class scientific individuals that will be able to provide solutions to challenging problems of science and technology in the field of electrical engineering, computers and communications. Another aim is to teach graduates the methods of scientific work, to prepare them to face the future challenges in smart wearables and wireless computing, and to furnish students with theoretical, experimental and practical knowledge from the field of wireless computing, automation, and communications engineering. The expected learning outcomes of the doctoral candidates include various branches of wireless communication systems, wireless positioning and navigation, digital signal processing, system modelling and simulation, wireless networks and protocols, and embedded systems.

ARTICLE 3 - STUDENT SELECTION AND ADMISSION

Professors and supervisors of doctoral students at both faculties can select and nominate candidates for the double degree doctoral education according to the selection criteria mutually agreed upon. The criteria are as follows:

- Master's degree or equivalent in the fields of electrical engineering, communications engineering, computers and Information Technology or a closely related field, completed with good grades.
- A sufficient proficiency in the English language. In order to be eligible for double doctoral education, the candidates must demonstrate during the admission procedure that they meet the English language requirements equal to the CEFRL level B2 or higher.
- A research plan to be implemented throughout whole doctoral study with the goal to prepare the doctoral thesis.
- At UPB, the student admission is done in June or September for a non-paying tuition fee entrance in October. At UPB, candidate admission is also open all-year around for tuition fee paying PhD students. At URC, the student admission is usually done in September for both tuition fee paying and non-paying PhD students entrance in October.

The candidates must fulfil the admission requirements of both universities. Final selection is to be made by the respective doctoral programs according to each program's admission criteria.

ARTICLE 4 - STUDENT STATUS

Students will be admitted to the PhD programme on a full-time basis and they will be registered at both universities as degree-seeking doctoral students. The University where the student will start the doctoral training will be referred to as the *home university*. The other university implementing this double degree doctoral education will be referred to as the *host university*. Students shall have the same rights and obligations as degree students in the respective institutions.

A set of documents detailing course requirements at both universities and requirements related to the research to be conducted, the final written dissertation and its oral defence, the assessment/grading of the thesis will be negotiated and concluded on faculty or doctoral program level for each individual student taking part in the double degree doctoral education. These annexes will be ratified by the respective responsible persons of the doctoral programs and by the student's supervisors and they shall bear a reference to this Cooperative Agreement.

The students will be studying according to the curriculum and mobility plan defined in the student-specific annexes. The language of instruction of these programs is English.

For each student, there must be one main supervisor at each university with allocated responsibilities. The aim is that the supervision work is divided evenly between the universities. The responsibilities and roles of the supervisors are to be specified in the student-specific annexes.

The supervisors should have a doctoral degree and be qualified to supervise doctoral studies according to the university regulations. The main supervisor at UPB must hold a habilitation degree certified by the National Council for Certification of University Titles, Diploma and Doctorates. The main supervisor at URC must hold the position of a Professor, Associate Professor (tenure track), Associate Professor (tenure track).

ARTICLE 6 - PERIOD OF CANDIDATURE

A full time student is expected to complete the requirements of the doctoral education in three (3) years. If the student requires more time he/she must seek approval from both universities. The aim of both parties is that the student will spend approximately equal amount of time at each university. However, if this is not possible, the supervisors of the student may agree on a shorter period at the host university. Details regulating this will be specified in the student-specific annexes.

Students selected to the double degree doctoral education shall be provided with a necessary workspace, research equipment etc. at both universities and the hosting university shall assist in locating suitable accommodation.

ARTICLE 7 - COURSEWORK REQUIREMENTS

In order to be granted a doctoral degree at UPB and at URC, the student has to fulfil the respective coursework requirements, which may be complementary or additional to those of the other university. Details regulating this, including a scheduled study plan, will be specified in the annexes.

ARTICLE 8 - FINANCIAL MATTERS

a) Fees

The tuition fees at URC will be covered from the A-WEAR project, funded by the European Union's Horizon2020 research and innovation programme under the Marie Skłodowska Curie grant agreement No. 813278 and coordinated by Assoc. Prof. Elena Simona Lohan, TUT.

UPB does not have any tuition fees for EU candidates being admitted in examination sessions organized by UPB in June or September. Non-EU candidates or candidates wanting to be admitted at any other time of the year will have to pay a tuition fee which will be covered from the A-WEAR project, funded by the European Union's Horizon2020 research and innovation programme under the Marie Skłodowska Curie grant agreement No. 813278 and coordinated by Assoc. Prof. Elena Simona Lohan, TUT.

Costs related to the conducting of research at the universities will be covered by project grants the A-WEAR project, funded by the European Union's Horizon2020 research and innovation programme under the Marie Skłodowska Curie grant agreement No. 813278 and coordinated by Assoc. Prof. Elena Simona Lohan, TUT, as agreed by the supervisors and agreed upon in the student-specific annexes.

b) Research scholarship and travelling expenses

Students not hired in the A-WEAR project are responsible to finance their living expenses and study materials and to seek for appropriate health insurance. The costs of living, housing, social insurances and other expenses related to studies are in the responsibility of the double degree candidates. Service units at both universities (at UPB: Doctoral school office; at URC: Doctoral school office) will assist candidates in practical and academic matters.

The living expenses, study materials, and health insurance of the students hired in the A-WEAR project will be paid by the A-WEAR project.

c) Fees related to the Dissertation

When Dissertation is held at UPB, UPB will cover the Dissertation fees and any fees related to the members of the Dissertation committee which are not from UPB or URC if the student has been admitted as non-paying tuition fee PhD candidate, and URC will cover the fees of URC main supervisor participating in the Dissertation committee. When Dissertation is held at URC, URC will cover the Dissertation fees and any fees related to the **three** members of the Dissertation committee which are not from UPB or URC, and UPB will cover the fees of UPB main supervisor participating in the Dissertation committee if the student has been admitted as non-paying tuition feePhD candidate.

ARTICLE 9 - CONTINUATION, WITHDRAWAL, TERMINATION OF CANDIDATURE

Students of the double degree doctoral education are required to follow the rules and regulations of both UPB and URC for doctoral candidates, including the conditions for continuation, withdrawal and termination of doctoral studies. If a student wishes to leave the double degree doctoral education he/she will be free to pursue a regular degree at either university, provided that existing regulations permit it.

ARTICLE 10 - DISSERTATION

The doctoral thesis is expected to contain research material of relevance superior to that attainable by work performed within a single PhD program. It will be written in English.

The thesis manuscript has to pass the preliminary examination in both universities before entering to an oral examination (called defence) according to UPB and URC rules, regulations and practices. Permission to publish the thesis as an academic dissertation will be granted only after passing the preliminary examination. The oral examination cannot take place before that. Both UPB and URC will consult each other before nominating any necessary organs for preliminary examination or before giving a permission to publish the thesis.

The defence of the thesis will be held at the Home University, and in the English language. The agreed committee for thesis defence will be nominated by the two universities in compliance with their regulations. The committee for the thesis defence will be composed of:

- 3 members, namely 3 external members from outside UPB and URC, when the defence of the thesis will be held at URC; in addition, the two main supervisors are also invited to attend the dissertation
- 6 members, namely: a president, the two main supervisors from UPB and URC, one additional member from UPB, 2 external members from outside UPB and URC, when the defence of the thesis will be held at UPB;

All members of the dissertation committee must hold a doctoral degree and have a well-reputed scientific career. It is recommended to offer the opportunity to participate in the public defence via video conference to one committee member from each university, at most.

ARTICLE 11 - GRADUATION

a) Graduation

Each university will separately examine and evaluate the progress of the student annually or with the prescribed frequency, and transmit the result of the evaluation to the other university.

(b) Doctorate

Both universities will issue (separately) their official doctoral degree certificate for the students of the double doctoral education, when all requirements are fulfilled. In addition to the degree certificate, a diploma supplement will be given to the doctoral students in accordance with regulations of individual universities. The supplement should describe, among other things, the structure and content of the doctoral

education, the nature of the degrees awarded and the mobility periods included in the training.

The doctoral degree certificates and diploma supplements of UPB shall state that the degree has been awarded within a double degree doctoral programme implemented by UPB and URC, indicating that the student is receiving a double degree. The diploma supplement of URC shall state that the degree has been awarded within a double degree doctoral programme implemented by UPB and URC, indicating that the student is receiving a double degree.

ARTICLE 12 - USE OF INTELLECTUAL PROPERTY

Doctoral candidates own the copyright to their dissertation and the dissertation is public. When the doctoral candidate is the sole author of the doctoral degree thesis, he/she alone has the copyright to the work. If the doctoral degree thesis consists of a collection of articles and a summary, the doctoral candidate has the copyright to those parts that are the results of his/her independent effort.

Both institutions shall have the non-exclusive right for a non-commercial use of the thesis and the results in their education, training and research. This right is perpetual and free of any charge.

If the doctoral student participates in an externally funded research project in which he/she shall transfer intellectual property rights to the university/universities, a separate written agreement shall be negotiated between the relevant parties.

ARTICLE 13 - SPECIAL SITUATIONS

Any disputes arising from the interpretation of this Cooperation Agreement shall be resolved jointly by and between respective faculties at UPB and URC. In the event of non-resolution, the first step is mediation by the Rector of UPB and the Rector of URC and the second step is to refer the dispute to arbitration under the Rules of Arbitration of the International Chamber of Commerce by one arbitrator appointed in accordance with said Rules. The place of arbitration shall be the city of registered office of the home university. The language of the arbitration shall be English. This Agreement shall be construed in accordance with, and governed by, the national law of the home university, excluding its conflict of law provisions.

ARTICLE 14 - EFFECTIVE DATE AND TERMINATION

This Cooperative Agreement will become effective upon signing and shall remain in effect until 31.8.2024. Modifications to this Cooperative Agreement may be made by mutual agreement and confirmed through an exchange of letters. The Cooperative Agreement may

be extended by mutual consent by the two parties.

The Agreement may be terminated by the appropriate authorities of either party giving sixmonth notice to the other party in writing. Both parties agree that in the event of any party wishing to terminate the Cooperative Agreement the student enrolled under the double degree education will be allowed to proceed and graduate under the programme of the other party.

ARTICLE 15 – LIABILITY

This Agreement will not give rise to any financial obligation by one Party to other. Each Party will bear its own cost and expenses in relation to this Agreement.

This Agreement has been signed in two originals in English, of which each institution has taken one.

Signing the Cooperative Agreement for University Mediterranea of Reggio Calabria

representative:	Rector
Name of the authorised representative:	Pro.f Marcello Zimbone
Date:	Signature:
Title of the authorised representative:	Head of Department DIIES
Name of the authorised representative:	Prof. Tommaso Isernia
Date:	Signature:
Title of the authorised representative:	Coordinator of the PhD Course in Information Technology
Name of the authorised representative:	Prof. Antonio Iera
Date:	Signature:

Signing the Cooperative Agreement for University Politehnica of Bucharest

representative:	Rector	And the state of t
Name of the authorised representative:	Mihnea Costoiu	TO STATE OF THE ST
Date: 29.01.2019	Signature:	10 (B) (S)
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representative:	Dean	FOUCAT
Name of the authorised		The second second
representative:	Prof. Dr. Adina Magda Florea	
Date: 28.01.2019	Signature:	
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Title of the authorised	Salar Salar	
representative:	Director of Doctoral School	
Name of the authorised	The state of the s	
representative:	Prof. Dr. Ing. Theodor Borangiu	,
Date: 12019	Signature:	- Sin

ANNEX: PROJECT-SPECIFIC INFORMATION

One of the A-WEAR recruited fellows (denoted in the A-WEAR Grant Agreement by ESR10 will register to this double degree program. The specifics of his project are given below:

ESR₁₀

Project Title and Work Package: Wearables for eHealth WP3, tasks 3.2, 3.4

Objectives: •Build a novel eHealth architecture based on wireless communication modules and links and wearable materials; •Create advanced algorithms used for decision making and data extracting in the eHealth architecture; • Prototype and test the proposed architecture using Arduino boards and Raspberry Pi-s

Expected Results: open-source SW and applications for eHealth wearables; novel eHealth architecture based on wireless communication modules and links and wearable materials; advanced algorithms used for decision making and data extracting in the eHealth architecture.

Planned secondment(s): 1. URC, 12 cumulative months, starting M21, work on decision making algorithms for SIoT and eHealth and attending local postgraduate courses, 2. CIT, 3 months, starting M37 to test the eHealth architecture on a robotic platform for AAL

Double PhD degree from: UPB and URC

Supervisory team: Prof. Popescu (UPB), Prof. Iera (URC), industrial mentors: Dr. O Cramariuc (CIT), Dr. B. Cramariuc (CIT)