# MEMORANDUM OF UNDERSTANDING

#### BETWEEN

# THE DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING AT COLORADO STATE UNIVERSITY

#### AND

THE DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING AT THE UNIVERSITY OF PUERTO RICO MAYAGUEZ

# I. INTRODUCTION:

This Memorandum of Understanding is made by and between The Board of Governors of the Colorado State University System, acting by and through Colorado State University (CSU) for the benefit of The Department of Electrical and Computer Engineering

here represented by Tony Frank, President and The University of Puerto Rico at Mayaguez (UPRM), here represented by Jorge Rivera Santos, Chancellor.

Both parties agree to establish a collaborative PhD program in Electrical and Computer Engineering. The main goals of this agreement are: 1) to encourage underrepresented students from UPRM to pursue graduate studies and careers in engineering research, and 2) to provide a means for faculty at UPRM to mentor PhD graduate engineering students. UPRM does not currently offer a PhD degree in ECE. Therefore, until such time as the UPRM ECE Department establishes a PhD degree program, this collaborative agreement will serve as an important bridge for UPRM students and faculty engaged in research. The PhD degree will be granted by CSU, and the student will be required to spend a minimum of two semesters in residence on the CSU campus. However, students will conduct most of their research on the UPRM campus, working with both their UPRM and CSU advisors.

# II. FACULTY PARTICIPATION:

- 1. One faculty member each from CSU and UPRM will serve as co-chairs of the student's dissertation committee. Both co-chairs will work closely with the PhD student to supervise the research and serve as the primary mentors.
- 2. UPRM faculty members advising PhD students in the program must become affiliate faculty members of the CSU ECE department in order to serve as a voting member of the student's dissertation committee. To apply for affiliate faculty status at CSU, UPRM faculty will state their interest in writing to the head of the CSU ECE Department and will include a current copy of their curriculum vitae. The affiliate faculty appointments

- are voted on by the department faculty. Similarly, interested CSU faculty will apply to the Departmental Graduate Committee at UPRM for affiliate faculty status at UPRM.
- 3. Other UPRM ECE faculty may also elect to become affiliate faculty members at CSU and serve on the student's dissertation committee.
- 4. UPRM dissertation committee members must attend the student's oral qualifying and preliminary exams and PhD dissertation defense. Participation by video conference is acceptable if travel to CSU is not feasible.

# III. STUDENT PARTICIPATION:

- 1. It is envisioned that the student will come to CSU early in the course of their PhD program to satisfy the CSU residency requirement and to take courses in preparation for the PhD. The requirements for the PhD degree are described briefly below and in more detail in the CSU Graduate School Bulletin. These requirements are subject to change as in any graduate program.
- 2. The student must be accepted into the UPRM Electrical and Computer Engineering Department as a "visiting" student by registering in any regular course and/or 0-9 credits per semester special course in "Doctoral Research for Collaborative Agreements".
- 3. Students must be accepted into the CSU Electrical and Computer Engineering Department PhD program. It is recommended that students submit their CSU application at least one semester prior to the start of their year in residence at CSU. Official CSU graduate program deadlines are September 1 for Spring admission and February 1 for Fall admission.
- 4. In order to be admitted to the CSU graduate program in ECE, students must have graduated from an accredited university with a bachelor's degree in a closely related field, have a minimum 3.0 GPA on a 4.0 scale, have taken the GRE, must submit an application, including at least 2 letters of recommendation, and pay the application fee.
- 5. The student should indicate on their CSU application that they are applying to the CSU/UPRM ECE Collaborative PhD program
- 6. The student will be provided with office and laboratory space (as required) while on the CSU or UPRM campus.
- 7. Students who apply to the CSU ECE PhD program may also apply for the Colorado PEAKS Alliance for Graduate Education and the Professoriate Fellowships.
- 8. Students may also apply for other CSU graduate fellowships.
- 9. Students entering the Collaborative Program will sign a statement to the effect that they will return to UPRM after the completion of the mandatory one-year residency at CSU and remain at UPRM working as required for the PhD degree unless otherwise terminated by his/her graduate committee. The exact duration of the residency on either campus will be determined on a case-by-case basis.

# IV. PhD DEGREE REQUIREMENTS:

To complete the PhD degree, students must fulfill the same graduate school and departmental requirements as any other CSU ECE PhD student. (72 credit hours for PhD).

- 1. The student must spend a minimum of two semesters in residence on the CSU campus, after their acceptance into the CSU ECE PhD Program. The student must register for a minimum of 9 regular course credits (non-dissertation credits) while satisfying the residence requirement. Student may register for dissertation credits during subsequent semesters at CSU.
- 2. Overall the student must maintain a 3.0 or higher GPA.
- 3. The student must pass the two PhD exams, namely the qualifying exam and the preliminary exam.
- 4. Students must defend their PhD dissertation on the CSU campus and schedule it with the CSU Graduate School at least 4 weeks in advance of the exam date. All committee members must be present for the defense (members may participate by video conference if travel to CSU is not feasible).
- 5. Students who wish to complete the M.S. degree at CSU and then pursue their doctoral degree, will be able to do so, following similar rules for the M.S.

# V. FUNDING:

This program is open to US Citizens and Permanent Residents only. Funding to the student will be in the form of full fellowships, renewable according to a student's progress. The amount of the fellowship is determined by the individual program and the faculty member in charge of the program. Individual faculty members are responsible for arranging funding for their travel between campuses. At a minimum, the student must travel to the CSU campus to attend the qualifying and preliminary exams as well as the PhD dissertation defense. This travel can be exempted if the graduate committee is satisfied with the level of interaction offered by current video conference technologies.

UPRM will be responsible for funding student stipend and any student travel through programs supported by NSF or other agencies. While in residence at CSU, the student may receive a stipend from UPRM.

CSU will not encourage students to apply to this program without an agreement from a UPRM faculty member. Students coming to CSU under this agreement are eligible to apply to the CSU Graduate Assistantship Office for a tuition premium (difference between in-state and out-of-state tuition). The in-state tuition will be paid from the funding resources of the sponsoring faculty at CSU. Two tuition premium awards will be made available for this program at the start, with a plan to add one additional award per year. In summary, students coming to CSU under this program will have their tuition fee paid by CSU in accordance with the above arrangement. As always, financial support is subject to the availability of funds.

# VI. CSU STUDENT FEES:

- 1. Students will be responsible for other required fees, including student activities and technology fees. These fees cover access to student health services, the recreational center, athletics and other programs.
- 2. Issues such as health insurance and housing will be taken care of by the students.

3. While conducting research at UPRM, if they are not registered at CSU, a PhD candidate must pay a continuous registration fee to CSU. This fee must be paid to maintain status as a CSU PhD student.

# VII. UPRM STUDENT FEES:

- 1. The students are required to pay for health services fees while in residence at UPRM.
- 2. While at UPRM, students may register in a special graduate-program course at UPRM, called "Doctoral Research for Collaborative Agreements", which carries a flexible 0-9 credits hours load. The student can also register in courses approved by his/her graduate committee, which may be transferred to CSU in order to comply with CSU requirements as specified in Section IV.2.

#### VIII. OTHER TERMS AND CONDITIONS:

- 1. The two parties are committed to maintaining records of all reports of timesheets for jobs, communications and all other documents related to the coordination of activities discussed in this agreement in order that they be available for examination or copying by the Office of Internal Auditors of the University of Puerto Rico, by a firm of outside auditors hired by the University of Puerto Rico, by the Office of the Comptroller of Puerto Rico in its auditing of the University of Puerto Rico as required by law. Audits will be carried out at reasonable times during the course of the services or after their completion, in accordance with generally recognized auditing practices. Said documents will be kept for a period of no less than six (6) years or until the Office of the Controller of Puerto Rico has made its investigation, whichever occurs first.
- 2. Neither party shall use the name of the other institution, its initials, stamp, logos, seal, or any other identifying emblem or distinctive symbol of the other institution without the express written authorization of the institution to which said objects belong.
- 3. Neither party shall assume any liabilities to each other. As to liability to each other the parties do not waive any defense as a result of this agreement. Likewise, this provision shall not be construed to limit the parties' rights, claims or defenses which arise as a matter of law pursuant to any provisions of this agreement. Additionally, this agreement shall not be construed to limit the sovereign immunity of the Government of Puerto Rico and the University of Puerto Rico or CSU.
- 4. The parties hereto understand and agree that liability for any claims or injuries to persons or property arising out of the acts or omissions of CSU, its agents or employees or students will be controlled and limited by the provisions of CRS 24-10-101, et. seq.
- 5. CSU and UPRM subscribe to the policy of Equal Opportunity and will not discriminate on the basis of race, sex, age, political orientation, ethnicity, religion, or natural origin. CSU and UPRM shall abide by these principles in the administration of this Memorandum of Understanding, and neither entity nor any of its representatives shall knowingly impose criteria for the exchange of scholars, staff, or students that would violate the principles of nondiscrimination.

Either party may rescind the present agreement by notification thirty (30) days prior to the date of the rescission. One party may immediately cancel the agreement without prior notice upon the

other party committing negligence, noncompliance or violation of a condition of the present Agreement. In the event this Agreement is not renewed for a subsequent term or is otherwise terminated as contemplated herein, students who are participating in the ECE program at the time of termination will be allowed to complete the then current school semester under the terms and conditions herein set forth.

# IX. MODIFICATION:

This Memorandum of Understanding may be modified only in writing by authorized representatives of CSU and UPRM. Modifications shall be incorporated by reference and made a part of this Memorandum of Understanding.

#### X. FORCE MAJEURE:

In the event that the performance of the obligations under this Memorandum are impeded by reason of Force Majeure, the parties shall be released from their obligations and neither party shall be responsible for any damage sustained and have no further recourse against the other party. Force Majeure shall mean accident before and after the installation of the equipment, fire, earthquake, hurricane, flood, Act of God or natural disaster, epidemics or pandemics, nuclear explosions, strike, work stoppages, or other labour disturbance, riots or civil commotions, vandalism, war or other act of any nation, terrorism, power of government, or government agency, or any other cause which is beyond the control of the parties.

# XI. DURATION OF AGREEMENT:

This agreement will be in effect a minimum of five years beginning from the date it is signed by both parties. At the end of the five years this agreement will be reviewed and considered for renewal by both parties. In addition, either institution can withdraw from the MOU with one semester notice to the other institution. In the event of premature cancellation of this agreement every effort must be made to accommodate completion of the degrees of the students in the program.

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The undersigned approve this agreement on this <u>10</u> day of <u>May</u>

# Colorado State University

Anthony	Frank
President	- 1

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Provost & Executive Vice President	
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