The mission of the Carnegie Mellon | Portugal Partnership is to create new knowledge in key focused areas of information and communications technologies by means of cutting-edge research, world-class graduate education, and a close connection with Portuguese Industry, thus placing Portugal at the forefront of Science and Innovation.

FCT
Fundação para a Ciência e a Tecnologia

MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E ENSINO SUPERIOR
Faculty Exchange Program Encourages Cultural Immersion

The Carnegie Mellon | Portugal Program has formalized a Faculty Exchange Program for faculty members in Portugal and at Carnegie Mellon University that aims to accelerate the adoption of best practices through cultural immersion.

This program builds on the experience of the Universidade de Coimbra and the Institute for Software Research (ISR), Department in the School of Computer Science at Carnegie Mellon University. Every semester for the last seven semesters a faculty researcher from the Universidade de Coimbra has spent the whole semester at Carnegie Mellon, in ISR.

The new Faculty Exchange Program will provide an opportunity for faculty to adopt, adapt, propagate, and consolidate the best practices used at top universities. Participants from Portugal and Carnegie Mellon will receive a mobility scholarship, funded by the Fundação para a Ciência e a Tecnologia, to cover living expenses.

During the exchange, Portuguese faculty will be exposed to the same environment and working conditions as their colleagues at Carnegie Mellon University and vice versa. The exchange participants will be hosted by a Carnegie Mellon department and receive a formal appointment as “visiting faculty.” They will participate in a research group, become a member of the teaching faculty (undergraduate and graduate), and will be actively engaged in other university activities. Through the exchange program, faculty will spend at least one semester at Carnegie Mellon and will conduct research, review educational practices, and experience the culture of the university.

Since the inception of the Carnegie Mellon | Portugal Program in 2006, collaboration between faculty and students has consistently increased. The establishment of the Faculty Exchange Program will enhance collaborative activity. For additional information visit www.cmuportugal.org.

Visiting ISQ Representatives Assess Developing Technologies

Instituto de Soldadura e Qualidade (ISQ) representatives, Liliana Silva and Rui Louro, have spent this fall attending Civil and Environmental Engineering classes and project meetings to learn more about technologies that are being developed on the Carnegie Mellon campus.

ISQ, an Applied Research Institute partner of the Carnegie Mellon | Portugal Program, is a private organization that works on technical inspection, training, consulting, research and development. Silva works for ISQ’s Non-Destructive Testing (NDT) Technologies Department, which employs technologies like ultrasounds and digital radiography to inspect a structure without having to take it apart. Louro works in the Calculation Department, which he describes as "design evaluation." Areas in this department include Engineering Consulting, Checking of Projects, and Evaluation of Structures.

The goal of the ISQ representatives has been to observe and assess new technologies, and determine whether they might be of use to Portuguese industry. As part of their visit, Silva and Louro have sat in on classes in data management, data acquisition, and probability and statistics.

To get a first-hand perspective of different early-stage technologies, Louro and Silva have also attended many project meetings. One project, called “Instrumental Pipeline Initiative,” headed by José Fonseca de Moura, involves the development of a new application of time reversal techniques to the inspection of natural gas pipelines. This project directly relates to Silva’s work in Non-Destructive Testing technologies, and both Silva and Louro find it promising. “It will probably be a standard in 20 years,” says Louro of the novel application. Early in the semester, Louro had also been following another project, led by Lúcio Soibelman, that relates to the standardization of computational implementation of building norms. Different nations and organizations have different building norms, which can become a problem in international projects where structures have to satisfy different criteria. “This is not easy,” says Louro, “because the norm has hundreds of pages and there is no expert in all the building standards; there are experts in portions [of the building standards]. This can be a serious problem.”

Computational format, he explains, makes it easier to see differences between standards and verify designs against those codes. Although this project is in the very early stages of development, Louro says that it has huge potential.

“I think it will have a world-wide impact if it comes to fruition,” says Louro. As part of this initiative, Silva and Louro have sent monthly reports on their observations, and will be debriefed for their opinions upon return to Portugal. Most projects are still in the very early stages of development, but Louro and Silva are hopeful of their eventual benefit to Portuguese industry. “While the technology is being developed,” says Louro, “you cannot pick it up and implement it right away. At a later date, we may end up using these technologies.”

www.cmuportugal.org :: December, 2009
Project “Automotive Mobility and Future Services”
HCI Student Wins International Competition

Nuno Laginha, a Professional Masters student in the Human-Computer Interaction program (MHCI) in the Carnegie Mellon | Portugal Program, was recently recognized by the Service Design Network and Volkswagen AG for his project “Automotive Mobility and Future Services.”

On October 26th and 27th, 2009, Laginha attended the Service Design Conference in Madeira, Portugal, where he was awarded first place in the Service Design Competition. The conference was hosted by the Service Design Network (SDN) and sponsored by Volkswagen. SDN was founded in 2004 by the Köln International School of Design, Carnegie Mellon University, Linköpings Universitet, Politecnico de Milano / Domus Academy, and the agency Spirit of Creation. It is a collaborative organization whose goals are to establish and maintain a body of knowledge in the field of service design.

As stated on the SDN website, the purpose of the competition was to find new services that address today’s changing mobility needs. Project submissions were to consider questions such as “Which social aspects of mobile lifestyles and (virtual) communities benefit from automotive services? Which services do you miss in vehicles and what would such services look and feel like?”

For Laginha, the most enriching aspect of the project was the user feedback and the field research he used to formulate his design solutions. He says that the research and methods he applied during the design process allowed him to “uncover relevant information and find opportunities instead of assuming them.”

“We go to the field in different stages of the process to investigate, evaluate, design, iterate, and implement,” says Laginha. “Through these processes, I was able to extract the driver’s real needs and work on them to create sustainable and supportive solutions.”

Laginha says that his coursework in the MHCI program gave him “the needed tools to successfully solve this ‘design problem.”’ He also points out that the program has consistently provided him with the opportunity to enact the same design process that he applied to his Service Design Competition project.

“The MHCI allow us to develop the capacity to deal with large amounts of data and stay focused on what is relevant regarding the final objective,” says Laginha.

“This Master program presents us challenges of this caliber daily,” he says. “We develop the capacity to deal with large amounts of data and stay focused on what is relevant regarding the final objective.”

“I am grateful that companies like Volkswagen AG recognize more than ever the importance of HCI,” says Laginha, “and especially Service Design: Developing products and services for the future.”

As first prize winner, Laginha was awarded 1000€ as well as an all-expenses-paid trip to the conference in Madeira, where he had the opportunity to present his project. In addition, Laginha was introduced to participating Service Design practitioners, academics, and service-focused companies from all over the world. His project will also be featured in a future of Touchpoint, the Service Design Journal.

Laginha holds a BA in Communication and Multimedia Design from the Instituto Politécnico de Coimbra, and is concluding his Professional Masters in human-computer interaction (HCI).

Holiday Party and Portuguese Dinner Buffet
December 11th, 2009
Place: Pittsburgh more

Software Engineering Seminar
December 12th, 2009
Place: Lisbon and Porto, Portugal more

Carnegie Mellon | Portugal Program: Security and Dependability Academy
December 14-15th, 2009
Place: Faculdade de Ciências, Universidade de Lisboa, Portugal more
Portuguese Tradition of Saint Martin's Magusto in Pittsburgh

On November 11th, 2009, the Ph.D. and professional master students enrolled in the Carnegie Mellon | Portugal Program celebrated the Portuguese tradition of Saint Martin's Magusto in Pittsburgh.

Organized by ICTI@CMU and CMUPA-CMU Portuguese Students Association, this event was held in the Newell Simon Plaza, at Carnegie Mellon University. The St. Martin's Day is commonly associated with the celebration of the maturation of the year's wine. Traditionally it is the first day when the new wine can be tasted. It is celebrated eating roasted chestnuts and drinking a local light alcoholic beverage, called água-pé, or the stronger jeropiga.

Valuing Knowledge stimulates economic development of the country
In Cienciapt, November, 2009 read

“Portugal is winning an innovation culture”
Interview with João Barros, National Director of the Carnegie Mellon|Portugal Program
In Jornal de Notícias, October, 2009 read

Portuguese Tradition of Saint Martin's Magusto in Pittsburgh

Mark your calendars
Industry Forum and Diploma Ceremony will take place in February 2010

The Carnegie Mellon | Portugal first Industry Forum and Diploma Ceremony will be held on February 22nd, 2010 at Universidade de Coimbra, Portugal. This ceremony will celebrate the achievements of the 2008 and 2009 graduates and foster a closer relationship with the Industrial affiliates.

During the 2010 Diploma Ceremony, the combined achievements of the Professional Masters graduates of December 2008 and December, 2009, will be celebrated in a joint ceremony in which dual degrees will be bestowed upon the graduates of the following collaborative programs: Professional Master of Human–Computer Interaction (HCI), Universidade da Madeira and Carnegie Mellon University; Professional Master of Information Networking (MSIN), Universidade de Aveiro and Carnegie Mellon University; Professional Master of Information Technology and Information Security (MSIT-IS), Universidade de Lisboa and Carnegie Mellon University; Professional Master of Software Engineering (MSE), Universidade de Coimbra and Carnegie Mellon University. Updates will be posted to the Carnegie Mellon|Portugal website at www.cmuportugal.org.

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