Carnegie Mellon Portugal

#27 | July 2023

News from the Fence

CMU Nanotechnologies and Material Science Team visits Portugal

In June, a **delegation of four faculty members from Carnegie Mellon University (CMU) visited 19 Portuguese Labs, Research Centers, and Institutes in the areas of nanotechnologies and material characterization.** Over four intensive days, the CMU Professors engaged in brainstorming sessions and meaningful discussions with the Portuguese Researchers, identifying common interests and directions of future research directions and collaborations under the scope of CMU Portugal Program.

The CMU delegation consisted of Theresa S. Mayer, Vice-President of Research at CMU and Professor in the Department of Electrical and Computer Engineering (ECE) and in the Department of Materials Science & Engineering; Elizabeth Dickey, Department Head, Distinguished Professor in the Materials Science & Engineering Department; Gary Fedder, Faculty Director, Manufacturing Futures Initiatives, Howard M. Wilkoff Professor, in the ECE Department & the Robotics Institute; and Gianluca Piazza, Nanofab Director and STMicroelectronics Professor at the ECE Department.





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CMU Portugal "Building bridges across the Atlantic" at Encontro Ciência 2023

The **Encontro Ciência 2023 Summit** took place July 5th to 7th, featuring the Portuguese Prime Minister, António Costa, and the Minister of Science, Technology, and Higher Education, Elvira Fortunato. During the Opening Ceremony, **the Prime Minister bestowed Medals of Scientific Merit** upon both national and foreign individuals who have made remarkable contributions to the advancement of science and the fostering of scientific culture in Portugal. **One of the esteemed recipients was Manuela Veloso,** a distinguished computer scientist and AI researcher, who has been an integral part of the CMU Portugal faculty since the partnership's inception in 2006.

In the afternoon, the **CMU Portugal Program hosted the "FCT International Partnerships: Building bridges across the Atlantic"** session in collaboration with the MIT Portugal Program (MPP) and UT Austin Portugal. This year,

the three international partnerships joined forces to promote a discussion on the far-reaching impact of the FCT GO Portugal collaborations with US institutions.







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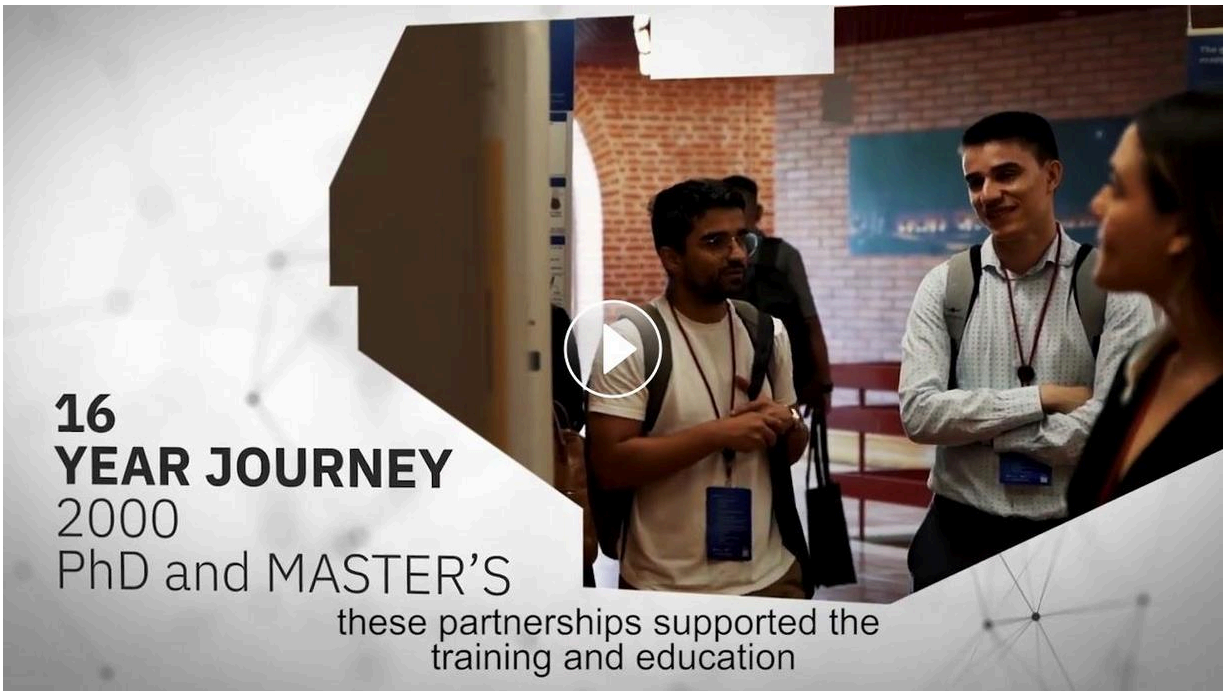
FCT International Partnerships: 2023 Overview Video

To showcase the remarkable accomplishments spanning nearly two decades of existence, the three FCT International Partnerships with US Institutions - CMU Portugal, MIT Portugal and UT Austin Portugal - have collaborated on creating an overview video to present at Encontro Ciência with a glimpse into their key outcomes.

Click to watch!



IntelligentCare Final Workshop: Improving Multimorbidity Management Using AI-Based Solutions

On June 30th, the IntelligentCare project consortia gathered at Hospital da Luz Learning Health for the presentation of the CMU Portugal Large Scale Project results. The IntelligentCare project presents an innovative approach to managing multimorbidity (MM) by adopting a patient-centric perspective and striving for optimized allocation of hospital resources, thus promoting the transition to value-based healthcare.

IntelligentCare is led by Hospital da Luz Lisboa/Hospital da Luz Learning Health in collaboration with Priberam, INESC-ID, Institute for Systems and Robotics (ISR-Lisboa), Instituto Superior Técnico and the Heinz College at Carnegie Mellon University (CMU).



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FLOYD Project Workshop and Presentations: "Unleashing the Future of Connected Mobility"

The FLOYD project, a CMU Portugal Large Scale Collaborative initiative, hosted a final Workshop in June at Altice Labs HQ in Aveiro and online. The event brought together members of the consortia and a diverse audience for a discussion on connected mobility and the integration of autonomous driving in our society.

Funded through PT2020 and FCT under the CMU Portugal Program, FLOYD is led by Capgemini Engineering in collaboration with ALTICE LABS, S.A., ISEP, IT Lisboa, VORTEX Colab and the Computer Science Department at CMU.

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Safeforest Project results shown in a Workshop at Universidade de Coimbra

The Safeforest project, a CMU Portugal Large Scale Collaborative Project, hosted a final Workshop at ISR Coimbra. The event brought together members of the consortia and a diverse audience to showcase the project's closing remarks and successful results.

Funded through PT2020 and FCT under CMU Portugal, the Safeforest – Semi-Autonomous Robotic System for Forest Cleaning and Fire Prevention is a groundbreaking initiative led by Ingeniarius, in partnership with Silvapor, ADAI, ISR Coimbra and Carnegie Mellon University.

Workshop Video

In the Media: TSF; Techenet ; Science X; Bit MagazineIn the Media: TSF; Techenet ; Science X; Bit Magazine

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Carol Smith (CMU) led @CMUPortugal Talk "Human-Centered and Responsible AI"

The CMU Portugal Program hosted the Talk "Human-Centered and Responsible AI" by Carol Smith, a senior research scientist in human-machine interaction in the Carnegie Mellon Software Engineering Institute's Artificial Intelligence Division, which addresses the need for leap-ahead AI capabilities that are reliable, responsible, safe, fair, and transparent.

Under an invitation by the CMU Portugal Program, Carol Smith spent a fruitful morning at CMU Portugal and ITI Facilities at Factory Lisbon - Hub do Beato, learning more about some of the initiatives in the field of Human Computer Interaction (HCI) and Responsible AI in which the Program is involved.

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"Cientista Regressa à Escola" is looking for Portuguese scientists to visit their primary school

The CMU Portugal Program is happy to support this year's edition of the Program "Cientista Regressa à Escola" in looking for Portuguese scientists willing to go back to their primary school to share their experience with young students.

Promoted by Native Scientists, a pan-European non-profit organization connecting underserved children and scientists, this initiative aims at promoting science communication and reducing inequalities in the access to science nationwide by taking scientists back to their primary school and organize science workshops with the students.

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CMU Portugal Inside Story: Manuel Reis Carneiro

Manuel Reis Carneiro is a CMU Portugal Dual Degree Ph.D. student in Electrical and Computer Engineering (ECE at Universidade de Coimbra and CMU's ECE Department). Manuel is supervised in Portugal by Mahmoud Tavakoli and at CMU by Carmel Majidi. He has an M.Sc. degree in ECE with a specialization in automation from Universidade de Coimbra and his research interests include stretchable and printed electronics, bioelectronic systems, and human-machine interfaces, with a special focus on medical applications.

Full interview on his background and amazing research work available on our website.



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Maria Casimiro: Interview Study on what motivates engineers to retrain ML models

Maria Casimiro, a CMU Portugal Dual Degree Ph.D. student in Software Engineering at INESC-ID, Instituto Superior Técnico and at CMU Software and Societal Systems Department is conducting a study on what motivates engineers to retrain Machine Learning (ML) models.

If you are a US based industry practitioner, we invite you to support Maria and her team by checking more about their study and get in touch for a quick interview!

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Upcoming events

- CFP ISD2023 - 31st International Conference on Information Systems Development I Aug. 30 - Sept. 1 I Técnico, Lisbon
- Clime Change AI Summer School 2023 I 14-18 August I Mila - Quebec AI Institute, Montreal, Canada or Virtual School
- Applications for New COST Actions I Deadline: October 25 I Online
- ERC Portugal Pre-assessment - “Consolidator Grant 2024” I October 12 I Online

CMU Portugal Publications

Papers

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- Carneiro, M. R., Tavakoli, M., & Majidi, C. Recyclable Thin-Film Soft Electronics for Smart Packaging and E-Skins. Advanced Science, 2301673.
- Carmona, J., Karácsony, T., Paulo Silva Cunha, J., & Member, S. (n.d.). BlanketGen-A Synthetic Blanket Occlusion Augmentation Pipeline for Motion Capture Datasets.
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- Kurunathan, H., Santos, J., Moreira, D., Santos, P. M., & Santos, P. M. (2023). Towards Safe Cooperative Autonomous Platoon systems using COTS Equipment Towards Safe Cooperative Autonomous Platoon systems using COTS Equipment Towards Safe Cooperative Autonomous Platoon systems using COTS Equipment.
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- Oliveira, R., Arriaga, P., & Barreiros, J. (2023). The role of humor in social, psychological, and physical well-being. Humor.
- Paper, C., Arora, J., Aftab Rashid, S., Nelissen Cláudio Maia, G., Tovar, E., Nelissen, G., Maia, C., Aftab Rashid CISTER, S., CoLab Porto, V., & Geoorey Nelissen, P. (2023). Memory Contention Analysis for 3-Phase Tasks Memory Contention Analysis for 3-Phase Tasks.
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