

UT Austin | Portugal INTERNATIONAL COLLABORATORY FOR EMERGING TECHNOLOGIES, CoLAB



■ Digital Media Summer Institute 2012

Short courses with UT Austin faculty in Lisbon and Porto.
Pre-registrations open until May 4, 2012.



The sixth annual Summer Institute will offer students and professionals in Lisbon and Porto the opportunity to explore a variety of digital media topics ranging from animation to entrepreneurial journalism.

Renowned instructors from the University of Texas at Austin will teach six intensive short courses from two to three weeks in duration in June and July. The courses will be taught at the graduate level.

Program at a Glance

Lisbon (FCSH/UNL)

- Entrepreneurial Journalism
Rosental Alves, UT Austin - 4 to 15 June
- Research Methods
Sharon Strover and Joe Straubhaar, UT Austin - 4 to 12 June and 21 to 29 June
- Cinematography
Steve Mims, UT Austin - 18 June to 6 July

Porto (FEUP)

- Animation: Illusional Worlds
Jeanne Stern - 25 June to 13 July
- Human Computer Interaction
Luis Francisco-Revilla, UT Austin - 2 to 21 July

More information about how to apply and the complete course descriptions can be found at: http://utaustinportugal.org/news/digital_media_summer_institute_2012

STUDENT HIGHLIGHT

Bruno Nobre, Digital Media PhD Program

Research Topic: "Interface Design for Digital Media: towards a methodology in interactive content production"

Bruno Nobre is an invited assistant professor and researcher at IADE – Creative University and also co-coordinator of the Multimedia Design and Interactive Contents Executive Master. In these last years he is being enrolled in the design, development and evaluation of usability and user experience in several interactive multimedia projects, enforcing to disseminate the importance of user experience in the development of digital interfaces and interactive products. At this moment he is also a Digital Media PhD student at FCT-UNL where is collaborating with the research project **"IMTV - ON-DEMAND IMMERSIVE-TV FOR COMMUNITIES OF MEDIA PRODUCERS AND CONSUMERS"**

COORDINATED BY THE RESEARCH CENTER FOR INFORMATICS AND INFORMATION TECHNOLOGIES (CITI - FCT/UNL).

His research aims to develop novel methodologies for the development and evaluation of user interfaces for interactive television, centered on a user experience approach and regarding an iterative software development



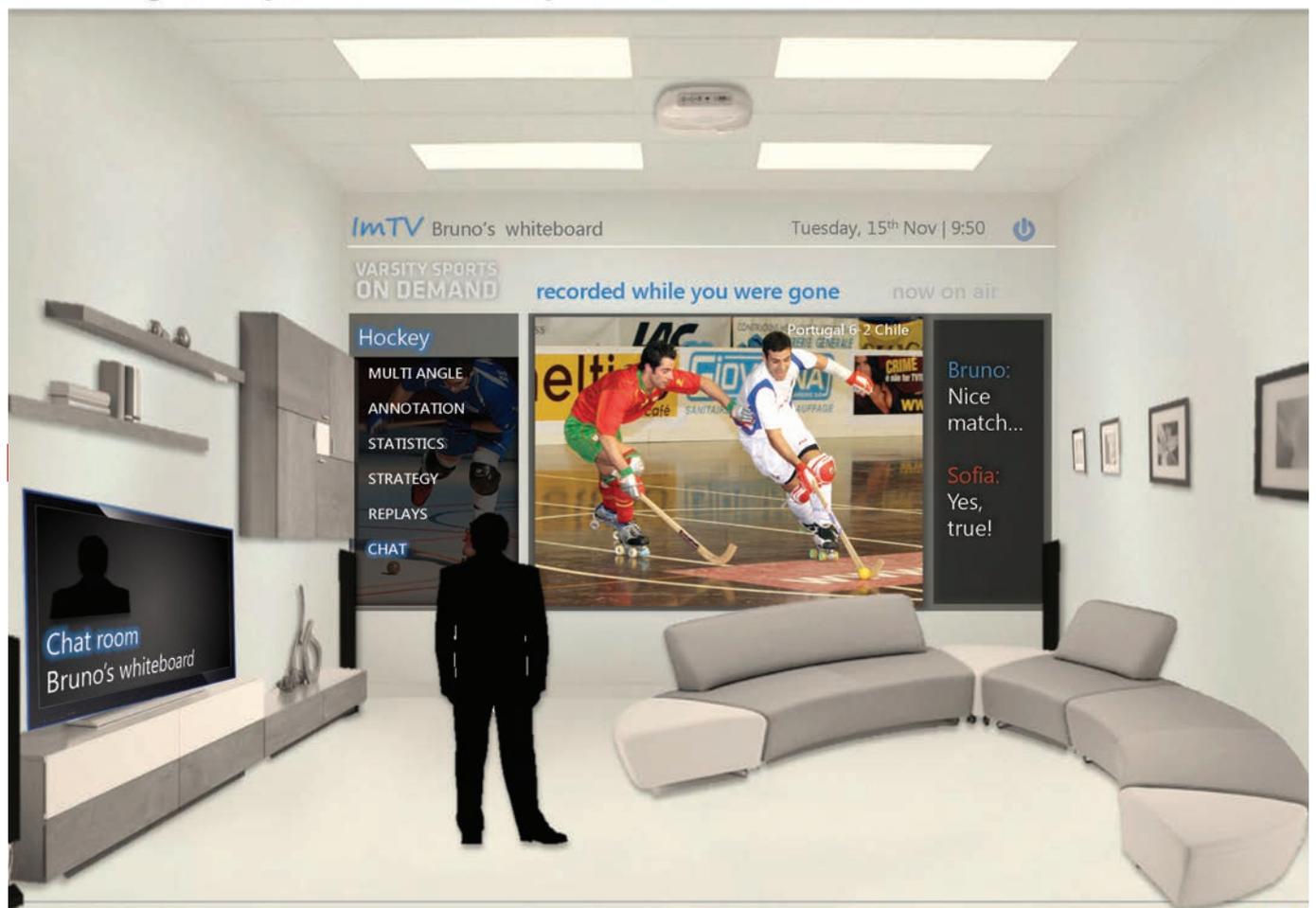
framework. The project background relies on the exploitation of the full potential of the new trends in media production and consumption by conceiving an on-demand immersive-TV framework combining TV industry, Internet distribution models and end-user's needs/interests. In this scope, Bruno is concerned the most, in the research of novel human-computer interaction models.

Bruno believes that the interface, particularly the graphical user interface, is a key factor for an interactive product. It is the element that bridges the gap between two worlds: the real and the virtual. It's through the interface that the user understands the system and inter-

acts with it. Furthermore, for many users the interface is the system itself, so it is a key role to establish a deeper research over the interactional development process in order to provide better, easier to use and more pleasurable user interfaces.

Sketching for a specific scenario > sports on demand

ImTV



ImTV Sketching

■ R&D PROJECT HIGHLIGHT

Project: SEE-THROUGH-SOUND

Principal Investigator: José Tomás Marques Henriques

Of great relevance to the project See-Through-Sound has been the recent hiring of researcher Michele Mengucci, selected in a public research call. His work is being supervised by Dra. Sofia Cavaco and Dr. Nuno Correia of FCT/UNL.

Research has focused on the processing of 2D images, converting relevant color blobs into sonic images. The main idea explores the fact that color images are a composition of three channels, Hue, Saturation and Value (HSV), each of which can be visualized as a surface, or a morphology. These three channels are translated into matrices of numbers whose information is translated into sound.

Current experiments map channel V to the volume of the sound being generated, while channel H is mapped to pitch, and channel S to timbre. The surface created through blob analysis is "played" at

once through a vertical scanning of the images being captured. The blob's size (Area), position (Centroid), and shape (Eccentricity) become sources for the attributes that the sound will display.

Algorithms for face detection are currently being incorporated into the main software toolbox. They add a meaningful data stream to be concurrently analyzed and conveyed as sound.

Two missions within this project were selected. A paper co-written by Dr. Sofia Cavaco was presented at "The 19th International Conference on Systems, Signals and Image Processing", IWSSIP 2012, in Vienna, Austria (April 11-13), and Dr. Tomás Henriques will present a paper at the "Conference on Human Factors in Computing Systems", CHI 2012, in Austin Texas, USA, (May 6-10).

■ UNL Student Premieres Fado Piece in Austin

Although he's in the land of country and blues, UNL doctoral student Tiago Videira has kept true to his roots and explored Fado music compositions while studying at UT Austin. This year, two of his fado-related pieces have been performed on campus.

In April, Videira's piece "A Portuguese Soul" premiered at a concert presented by UT's Butler School of Music. The piece composed for string quartet mimicked the four layers that comprise fado próprio. Instead of using guitars as in traditional Fado, those parts were played on the violin, viola, and cello.

In the fall semester, Videira presented "The Portuguese Way," which was composed for solo piano. Both of the pieces were included in the programs for semester recitals that drew large crowds. Videira says that the experience has been beneficial both for him and the local community. "These compositions not only were a kind of cultural mark left on American soil but also nifty experiments on my part to better understand how the rules and intuitions I have about instrumental music based on fado work," he says.

■ Digital Media Program Affiliates to Present at ACM SIG-CHI Conference in Austin

One of the most prominent conferences in the Human-Computer Interaction field, SIG-CHI, comes to Austin this May, and the UT Austin | Portugal Digital Media Program will have a presence there. Four researchers related to the UT Austin | Portugal Digital Media program will present recent work at the conference.

Tomás Henriques, now an assistant professor at Buffalo State College; Luis Leite of U.Porto; João Beira, a doctoral student at UT Austin and U.Porto; and Isabel Paiva of UNL all have work at the SIG-CHI conference which takes place May 5-10 in Austin.

Henriques, who won an FCT-funded exploratory grant for his "See Through Sound" project, will present his project titled "Sonic Spring." This interface uses gestural motion and kines-

thetic feedback to control sound output. It is based on a 15-inch spring that provides expressive capabilities to the user.

Leite, also known as "Grifu," has a paper titled "Shape Your Body: Control a Virtual Silhouette Using Body Motion." This describes research that explored using the Microsoft Kinect input device for real-time animation. This enables full-body control of virtual puppets on screen.

Beira and Paiva collaborated on a team that also included researchers from UT Austin's School of Information and the Netherlands. This team will present a project titled "Super Mirror: An Interface for Ballet Dancers." Super Mirror also uses the Microsoft Kinect to record ballet positions and real movement.

■ New Digital Media Intern Arrives in Austin

Several young professionals and graduate students gained new professional experiences through Digital Media in internships in Austin. Last month, a new intern arrived in Austin in time for the South by Southwest group of media conferences.

Filipa Rodrigues, who recently completed a degree at U.Porto, is interning at KUT-FM, a public radio station based at UT Austin. KUT has received broad recognition for its innovative use of digital media in news reporting and bridging aural programming on the radio and digital media online.



Rodrigues has been interning in the news department, where she has been tasked with a variety of digital media responsibilities. In particular, she has been working on stories related to the Austin mayor and city council election coming in May.

Emily Donohue, the news director at KUT is particularly enthusiastic about the interns the Digital Media Program provides, saying, "Everyone you've sent our way has been great." Interns have also said that working at KUT has shown them new ways of working and organizing news operations.

■ UTEN CORNER

SAVE THE DATE: 2nd UTEN Portugal Workshop (in collaboration with CMU Portugal)

Dates: 21st and 22nd May

Venue: Sala de seminários (Seminar Room) da Reitoria da Universidade do Algarve (Faro)

"Startup funding: Streamlining venture capitalists and business angels" is the theme for the 2nd UTEN Workshop 2012 that will run in collaboration with the CMU Portugal Program. This two-day workshop targeted at Technology Transfer Officers (TTO's) and Start-Up Companies aims to increase the awareness and knowledge about the key aspects to successfully get venture funding in the US.

A renowned expert from Carnegie Mellon University (CMU), Robert Unetich, will present his views on how to approach Venture Capital (VC). Robert M. Unetich is an active member of several Pittsburgh based venture capital firms, including Pittsburgh Equity Partners, and he is an active angel investor.

Strategic Investor vs. Venture capitalist/Business Angel, Venture capitalism in the U.S, Ways to approach a venture capitalist, What are the expectations of companies interested in coming to U.S. from a foreign country and Risk vs. Return are some of the questions up for discussion.

Robert Unetich – short bio

Robert M. Unetich is a graduate of Carnegie Mellon University (CMU) with a degree in Electrical Engineering. In 1982, he co-founded Information Transmission Systems Corporation (ITS) and, as President, grew it until its acquisition in 1996 by ADC Telecommunications, Inc. Robert retired in 1997 and became an Adjunct Professor at CMU in that year, teaching Entrepreneurship and Engineering Economics. In 1999 he co-founded Applied Electro-Optics with two CMU professors.

In the 1980s Robert Unetich was the winner of the regional SBA Entrepreneur of the Year Award and in the 1990s he won the Ernst & Young regional Entrepreneur of the Year award. He has been directly involved as a founder or lead

investor in eleven startup companies. Moreover, Robert holds two US patents and has several patents pending.

Presently, Robert Unetich owns and operates a consulting firm known as GigaHertz LLC (www.gigahertzllc.com) and continues to perform lecturing assignments with engineering students at CMU and the University of Pittsburgh on business, innovation and entrepreneurship.

Further updates with regard to the workshop program will be posted on our Website (www.utenportugal.org) and our Facebook page (www.facebook.com/UtenPortugal)

■ UTEN Portugal is now on Facebook!

Stay connected with UTEN Portugal on Facebook. Keep up to date with all the news and events on our Facebook page: <https://www.facebook.com/UtenPortugal>



■ Student Projects in the UT Austin | Portugal program published in Portuguese media

- Catarina Mota - <http://www.open-materials.org/catarina/> - in TVI24 online



- Carlos Guedes and "GimmeDaBlues" project in SIC NOTÍCIAS (Exame Informática TV)



- Rui Avelans Coelho and his project "e-maestro" in SIC Notícias (Exame Informática TV)



The full TV program can be found at: <http://exameinformatica.sapo.pt/videos/eitv/2012/04/09/analise-ao-novo-ipad-e-como-tocar-jazz-sem-instrumentos>



- Diana Marques - <http://www.dianamarques.com/> - in Visão newsmagazine



Events

- **ACM SIGCHI Conference on Human Factors in Computing Systems**
5 May to 10 May, Austin, Texas

The ACM SIGCHI Conference on Human Factors in Computing Systems is the premier international conference on human-computer interaction. CHI 2012 focuses on the centrality of experience—from the models, theories and practical insights we need to understand and design for user experience to experiencing innovation through hands-on interactivity.

<http://chi2012.acm.org/>

- **2nd UTEN Portugal Workshop (in collaboration with CMU Portugal)**
May, 21 and 22, Universidade do Algarve, Faro

Further updates will be posted on www.utenportugal.org and on www.facebook.com/UtenPortugal

- **Digital Media Summer Institute**
June-July, 2012, Lisbon and Porto

More information at: http://utaustinportugal.org/news/digital_media_summer_institute_2012

- **Mathematics Summer School and Workshop 2012**
July 2-13, 2012, UNL, Lisbon

The CoLab Mathematics Summer School and Workshop is a yearly event that aims at bringing together Ph.D. students and junior faculty with well-known experts in several areas of mathematics.

More information at: <http://math.utaustinportugal.org/summer2012/index.phtml>

Ongoing Opportunities

- **Advanced Digital Media Mobility Awards**

Awards for Digital Media faculty and student travel to UT Austin. For more information please visit <http://utaustinportugal.org/calls/dm-travel>.

Useful links

www.utaustinportugal.org

www.fct.mctes.pt

www.utexas.edu

www.ic2.org

www.ati.utexas.edu

www.austin-chamber.org

<http://colab.ic2.utexas.edu/dm/>

www.utenportugal.org

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