DIGITAL MEDIA YEAR 6:
September 2011-August 2012

UT Austin | Portugal
INTERNATIONAL COLLABORATORY FOR EMERGING TECHNOLOGIES, CoLab
Telecommunications and Information Policy Institute, UT-Austin
EXECUTIVE SUMMARY:

The UT Austin | Portugal Digital Media Program has steadily continued to foster the development of digital media education and industry in Portugal. Despite limited resources in the sixth year, the program strengthened existing initiatives including the doctoral programs, and even moved toward increased collaboration with the RTP broadcasters. The program continues to build relationships among scholars, independent entrepreneurs, major media industry players, and other members of the digital media community at a variety of institutions around the world. In doing so, it has highlighted Portugal’s developing identity as a site of technological innovation, entrepreneurial creativity, and innovative academic research.

This report outlines the accomplishments of the program in the 2011-2012 academic year. Highlights of Year 6 include:

- 22 research project presentations at major conferences around the world.
- 41 publications among the 9 research teams including 2 books and 14 journal articles.
- Support of 20 doctoral UNL and U. Porto student exploratory visitors, each spending a week in Austin exploring the university’s resources and meeting potential co-advisors.
- Hosting 16 long-term visitors including doctoral researchers, post-docs, and students taking courses full time at UT for one or more semesters.
- UT faculty teaching 2 full semester courses in Portugal.
- The Summer Institute 2012, featuring 5 courses in Lisbon and Porto ranging from digital animation to research methods.
- UT faculty leading classes at Academy RTP, a professional development program for emerging media makers organized by public broadcasting corporation RTP.
- The continuation of its highly rated professional internship program, furthering the development of 7 visitors’ professional skills and career networks in marketing, filmmaking, digital journalism, and other fields.

In spite of limited resources, UTA-P has continued in producing top-notch, innovative research, supporting the ongoing development of the doctoral program, offering new opportunities for students to learn digital media skills and theory, and strengthening relationships with industry partners.
RESEARCH: Funded Project Activity
The following is a summary of diverse research projects that have grown out of the two calls for proposals made in 2009 and 2010. The project teams consist of faculty from UT Austin, U. Porto, UNL, and several other Portuguese universities. Graduate students from member institutions also frequently have been integrated into the teams, giving them valuable experience in performing highly collaborative and often very interdisciplinary research. The projects’ results and subsequent analyses have been disseminated around the world at numerous conferences and in a variety of peer-reviewed publications.

Digital Inclusion and Participation (initiated 2009)
This research has four primary goals: To understand the conditions and trends for access and ownership by users and non-users of digital media and information and communication technologies; to promote comparative research and advanced education in digital media between Portugal and the United States; and to contribute to the public policy arena to inform the discourse and decision making process impacting the digital industries. More specifically, the project intends to engage policy-makers and digital social agents (including teachers) to understand users and non-users of digital media and ICTs. Finally, the project is disseminating relevant recommendations for the development of initiatives for digital inclusion and participation and contributing to the public debate on digital and social inclusion of non-users and minority populations.

Presentations

Publications
*Books*


*Journal articles*


*Book chapters*


**Kinetic Controller Driven Adaptive & Dynamic Music Composition Systems (initiated 2009)**

This joint research project is developing new techniques and strategies for computer-assisted composition in the context of real-time user control with non-standard human interface devices for applications in electronic art and digital entertainment systems. The research team is designing and implementing real-time software, hardware and specialized human-interfaces that will provide tools and resources for music, dance, theatre, installation artists, interactive kiosks, computer games, internet/web information systems. In 2012, GimmeDaBlues, an iPhone App
developed by members of the Kinetic team at INESC TEC, won the nationwide Prémio ZON competition in the category of Multimedia Applications.

**Presentations**


**Publications**


**Project Breadcrumbs (initiated 2010)**

Breadcrumbs aims at improving the ability of journalists to understand the interests of their readers and the implicit relationships readers perceive between different articles, phrases and events. Research activities include: Designing and evaluating interfaces that support advanced reading behaviors such as clipping and annotating; designing and developing mechanisms that can detect relationships based on the news clipping; and noting the behavior of user groups.

**Presentations**


**Publications**


**iDTV Health (initiated 2010)**

The iDTV Health project focuses on the potential of digital interactive television (iDTV) to promote original services, formats and contents that can be relevant to support personal health care and wellness of individuals over 55 years of age in the Portuguese territory. The project intends to evaluate the satisfaction and potential generated by a iDTV service as a way to support personal health care and wellness and facilitate access to information visualization and contents, looking especially at the service’s ability to increase levels of social capital among the target group. The research focuses on individuals over 55 years of age with low levels of technological literacy and health professionals.
Presentations


Publications
Journal articles

Damásio, M. (2011). Social capital: Between interaction and participation. CM:
Communication Management Quarterly: Časopis za upravljanje komuniciranjem 21, 35–58.


Book chapters

Proceedings


Workshops

E-health: bridging, connect and innovating (November 2012), Annenberg School for Communication & Department of Psychology, University of Southern California.

Tecnologias Interactivas de Apoio aos Idosos (July 2012). Universidade de Aveiro.

ImTV (initiated 2010)
High-quality entertainment video shows are now created by professionals, independent producers and amateurs that publish their media online and free of charge. While this new media workflow creates added-value services for end-users (e.g., personalizing their TV viewing), it also breaks traditional TV concepts and affects key economic functions such as program scheduling, audience measurement, and targeted advertisement. The long-term vision of this proposal is to exploit the full potential of new trends in media production and consumption
by devising an on-demand immersive-TV framework combining TV industry, Internet distribution models and end-user’s needs/interests.

**Presentations**


**Publications**

**Journal Articles**


**Book Chapters**


**Proceedings**


**INVITE: social Identity and PartNership in VIrTual Environments (initiated 2010)**

Project INVITE explores the development of artificial intelligence mechanisms to create artificial players (autonomous agents) that can perform well in complex social situations provided in games and virtual environments. The research focuses on interactions between agents and human players, specifically on the creation of agents able to display believable human-like behavior including comprehension of the different social groups in a game, the game itself, and the other players.

**Publications**

*Proceedings*


LIFEisGAME: Learning of Facial Emotions using Serious GAMEs (initiated 2010)
The ability of socially and emotionally impaired individuals to recognize and respond to emotions conveyed by the face is critical to improve their communication skills. The LIFEisGAME project attempts to show how to pioneer and apply a serious game approach to teach people with Autism Spectrum Disorder (ASD) to recognize facial emotions, using real time synthesis and automatic facial expression analysis. LIFEisGAME advances the synthesis of realistic virtual characters and markerless motion capture technology, and creates a non-stressful game to help individuals recognize facial emotions in an interactive way.

Presentations
Abirached, B. et al. (2011, November). Improving communication skills of children with ASDs through interaction with virtual characters. Presented at the IEEE International Conference on Serious Games and Application for Health (SeGAH), Braga, Portugal.


Publications
Journal articles


Book chapters

Proceedings
International Conference on Computer Vision Workshops, Barcelona, Spain (pp. 1889-1896). doi: 10.1109/ICCVW.2011.6130479


REACTION: Retrieval, Extraction, and Aggregation Computing Technology for Integrating and Organizing News (initiated 2010)

News is no longer simply produced and consumed, but instead continually evolves over time as a cooperative dialog between news outlets and the public at-large. News presentation must fundamentally reflect this, providing anytime organization of the latest events, conveying how story elements developed over time, and integrating the story in the larger world context. This project investigates new tools for providing greater automation in newsgathering, analysis, and delivery, while respecting practical constraints of news producers and consumers. The research emphasizes decomposition of stories into granular elements and discovery of implicit relations between them. The project also focuses on the relationships between news and social networks, both explicit and implicit, which underlie the news and significantly shape its content, quality, and authority.

Presentations


Lease, M., Ryu, H., & Woodward, N. (2012, March). Discovering memes in social media. Presented at the Chapter Meeting of the ACM Special Interest Group (SIG) on Knowledge Discovery and Data mining (KDD), Austin, USA.

Publications

Proceedings


See-Through-Sound (initiated 2010)

This exploratory research project attempts to see if computer audio technology can provide useful ways of understanding the physical environment. Principal investigator José Tomás Marques Henriques, originally of UNL, is developing sound patterns to describe the surroundings to the user and then building a prototype that incorporates spatial-sensing technology to help users navigate physical spaces. Research has focused on the processing of 2D images, converting relevant color blobs into sonic images. The three channels of composition of color images—hue, saturation, and value—are translated into matrices of numbers whose information is translated into sound.

Presentations


RESEARCH: Other Activity

Fall 2012 Resident Researcher Alcimar Queiroz
Dr. Alcimar Queiroz of the Instituto Universitário de Lisboa, a yearly participant at the International School for Digital Transformation in Porto, arrived in September 2012. His research seeks to explore conceptualizations and implications of the information society within developing countries, particularly several Latin American countries and the BRIC countries (Brazil, China, India, China).

Fall Resident Researcher Carlos Guedes
Carlos Guedes, an Invited Associate Professor at the University of Porto and UT Austin | Portugal Digital Media program director, spent the fall 2011 semester at UT Austin as a Fulbright Visiting Scholar. While visiting in the UT Austin Radio-Television-Film Department, he performed research on machine learning algorithms as applied to automatic music generation. This work contributes to the research project "Kinetic Controllers Driven Adaptive Music Composition Systems," led by principal investigators Guedes and Bruce Pennycook of UT Austin, and Tomás Henriques of Buffalo State University of New York and formerly of the New University of Lisbon. Guedes also met with several members of the research team in Austin, including graduate students Rui Dias and Georges Siorios, who came to Austin on short exploratory visits, and Andre Hopzafel, a former INESC Porto researcher now at Bahçeşir University in Istanbul. Guedes also completed three commissioned works while in Austin. These works include electronic music composed for a ballet at Teatro de Ferro, interactive electroacoustic music presented at Miso Music Portugal, and music for a ballet performed at Balleteatro. Additionally, he made preparations for a major musical work to be presented in 2012 at the Guimarães European Capital of Culture.

7th annual SOPCOM conference
Professor Rosental Alves of the UT School of Journalism participated in the 7th annual SOPCOM conference in Porto. The national conference examines Portugal’s digital media and communication industries and in 2011 focused on the effects and challenges of globalization. Alves participated on the panel Do Jornalismo ao Ciberjornalismo: Questões para um Novo Paradigma (Journalism and Cyberjournalism: Issues for a New Paradigm), presenting research on the role of journalism in the new digital media environment.
ACM-SIG-CHI Conference, Austin TX, May 2012

Several Digital Media faculty and students presented research at the ACM-SIGCHI annual conference on Human Factors in Computing Systems, one of the leading international meetings on Human-Computer Interaction. Attendees included U. Porto professor Verónica Orvalho, U. Porto students Tiago Fernandes and Luís Leite, UNL researcher Tomás Henriques, student Isabel Paiva of UNL, who is currently taking courses at UT, and dual-degree student João Beira, who is enrolled in the Radio-TV-Film PhD program.

Orvalho and Leite participated in the Design and Human Experience poster session, presenting “Shape Your Body: Control a Virtual Silhouette Using Body Motion.” Employing an actor’s entire body as a means to control a virtual silhouette, the project allows real-time animation of a virtual shadow puppet. In doing so, the work combines live acting performance and the manipulation of a puppeteer. Orvalho also presented research in another poster session titled “Mind Maps as Behavior Controllers for Children,” with U. Porto students and Instituto de Telecomunicações researchers Tiago Fernandes and José Serra. The project proposes a new interface method for controlling virtual characters’ artificial intelligence and behavior in games.

Henriques, who is currently a post-doctoral researcher at the Music Department of Buffalo State College in New York, presented a paper describing SONIK Spring, a new digital music production interface that allows real-time control of sound. Using a fifteen-inch spring controlled by the user’s hands, the technology links gestural motion and kinesthetic feedback to the musical experience.

Working with an interdisciplinary team of researchers and consulting faculty, Beira and Paiva are developing a motion-capture technology application called Super Mirror: An Interface for Ballet Dancers. Using Microsoft’s Kinect, a motion sensing input device, the application records dance poses and captures live motion, comparing the two in order to improve the quality of performers’ feedback. The project is highly interdisciplinary and includes the collaboration of UT School of Information students Zoe Marquardt and Natalia Em as well as Sebastian Kox, a Netherlands-based multimedia artist and technology developer.

International Communication Association Conference, Phoenix AZ, May 2012

Members of the UTA-P Digital Media program faculty traveled to Phoenix, Arizona for the annual conference of the International Communication Association, a leading international organization of communication scholars. The conference’s divisions and interest groups encompass a broad range of specializations including communication law and policy, global communication and social change, and information systems. In addition to Sharon Strover’s presentation on ImTV research described above, program faculty Joe Straubhaar, Laura Stein, and Karin Wilkins participated in several aspects of the conference, chairing panels, serving as respondents, and presenting emerging research in a variety of areas.
Straubhaar presented a number of research projects, addressing topics including identity construction and media use among families in Austin, Texas, co-authored with UT Austin doctoral student Laura Dixon; Brazil’s media exports and cultural presence; children’s influence on their parents’ media adoption patterns; and the use of media in the construction of cultural geography in Texas. Wilkins’ contributions to the conference included participation in a panel that re-examined the concept of cultural imperialism in the context of social change. Stein also presented research on law and policy conflicts and activist media. Additionally, Stein and a faculty alumna of the UTA-P program’s International School on Digital Transformation, Tanya Notley, presented a paper on transnational communication activism among rights advocates, co-authored with UT Austin doctoral student Stuart Davis. Portuguese doctoral student Cláudia Silva, whose interests include digital media and journalism, also attended the conference to participate in a special pre-conference devoted to mobile communications.

Patent Awarded to Digital Media PhD Student
Doctoral student Marta Isabel Santos Paiva Feraz da Conceição patented an interactive wearable video game in July 2012. The solar-powered game implements a series of wireless electronic sensors and allows players to interact with their physical environment, using their entire bodies to control the game. Players experience a blend of virtual and physical realities and may communicate with one another via a Web connection. Feraz da Conceição is waiting for the final approval of another patent, involving robotics. Since January 2011, she has been a visiting researcher at UT Austin.
EDUCATION
PhD, Digital Media

Doctoral Symposium, Austin TX, December 2011

On December 3, UT Austin-Portugal doctoral program students gathered with visiting researchers, faculty members, and UT Austin graduate students to present their research, followed by brief talks by leaders of UT Austin | Portugal sponsored projects. The five-hour symposium showcased the diverse, highly innovative work being developed in Digital Media, and allowed members of the program, who are spread across different colleges and schools at UT Austin, to share their progress with one another and get feedback from faculty members and their peers. The doctoral symposium was the second one of the year; in October, doctoral students studying in Porto and Lisbon presented their research projects during the futureplaces festival in Porto.

The meeting featured 15 presentations as well as a very successful networking lunch, and was attended by approximately 40 people, including exploratory visitors Pedro Bastos, Filipe Lopes, Rui Dias, and George Siorios of U. Porto. Directors Sharon Strover and Carlos Guedes led the symposium, which featured research from doctoral students Marta Feraz da Conceição, Luís Frias, Isabel Paiva, Tiago Videira, Rossana Santos, and Afonso O’Neill of UNL and Carlos Figueiredo and João Filipe Beira of U. Porto. Dr. Craig Watkins of the Department of Radio-TV-Film and an expert on youth and social media, was the keynote speaker for the symposium. Figueiredo and Paiva are currently enrolled as non degree-seeking students at UT Austin, and Beira is a member of the UT Austin doctoral program as well as the U-Porto program. The students gave brief but thorough overviews of their work, examining a broad range of topics including interactive film, social network interactions, generative music systems, and perception of urban spaces, among many others. Additionally, visiting scholar Dr. Alcimar Queiroz of the Instituto Universitário de Lisboa discussed his research on the conceptualizing of the information society within developing countries, and interns Rui Silva and Diana Castilho talked about their respective work experiences in audio production and digital marketing.
Exploratory Visitors

In the fall semester of 2011 and spring semester of 2012, twenty doctoral students made exploratory visits to UT Austin. A list of the students and their home institutions is represented below. During exploratory visits, students spend 7-10 days meeting with faculty from UT programs including the Department of Radio-TV-Film, the Department of Art and Art History, the Department of Theater and Dance, the School of Information, the School of Music and the School of Engineering. These meetings allow the students to speak with various faculty members in person, discuss their work plans, and identify Austin-based co-advisors for their thesis development. The students have the opportunity to explore UT Austin campus resources and the city of Austin as well, with a view toward returning as visiting researchers or registered non degree-seeking students.

Doctoral Exploratory Visitors, Fall 2011-Spring 2012
Amarante Abramovici U. Porto
Pedro Bastos U. Porto
Hugo Castanho UNL
Sandra Mónia Couto Coelho U. Porto
Rui Dias U. Porto
Paulo Fontes U. Porto
Vânia da Silva Gonçalves U. Porto
Fernando Governo U. Porto
Ana Nunes Jorge UNL
Luís Leite U. Porto
Filipe Lopes U. Porto
Soraia Mesquita Ferreira U. Porto
Bruno Daniel do Nascimento Nobre UNL
André Alves Pires Correia UNL
Yago de Quay U. Porto
Dora Santos Silva UNL
Luís Álvaro da Silva Fernandes UNL
George Siorios U. Porto
Diana Cristina Valente Marques U. Porto
Andreia Teles Vieira UNL

Photo 4: Visiting students explore the UT campus
Doctoral Students in Residence

Nine doctoral students spent the fall 2011 semester at UT Austin. Three students from Portugal registered as full time students. Enrolled students must take nine credit hours (typically three courses) during the semester, and may select from courses across the campus such as at the School of Information or in the Department of Radio-TV-Film. Students doing thesis research in Austin devote their visits to deepening their understanding of the digital media field, working under the supervision of faculty co-advisors, and developing their dissertation proposals. Registered students and visiting researchers take advantage of the University’s extensive system of libraries, including access to a comprehensive collection of online databases, and diverse research facilities. Students with developed research plans undergo the University’s rigorous Institutional Review Board process to approve the use of human subjects, with the support of their UT faculty co-advisors.

Doctoral Students in Residence, Fall 2011

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>João Beira</td>
<td>U. Porto (dual-degree w/ UT)</td>
<td>Carlos Guedes</td>
</tr>
<tr>
<td>Marta Feraz da Conceição</td>
<td>UNL</td>
<td>António Câmara</td>
</tr>
<tr>
<td>Carlos Figuieredo</td>
<td>U. Porto</td>
<td>José Azevedo</td>
</tr>
<tr>
<td>Luís Frías</td>
<td>UNL</td>
<td>Francisco Cádima</td>
</tr>
<tr>
<td>António Maneira</td>
<td>UNL</td>
<td>Carlos Correia</td>
</tr>
<tr>
<td>Afonso O’Neill</td>
<td>UNL</td>
<td>António Câmara</td>
</tr>
<tr>
<td>Isabel Paiva</td>
<td>UNL</td>
<td>Carlos Correia</td>
</tr>
<tr>
<td>Rossana Santos</td>
<td>UNL</td>
<td>Nuno Correia</td>
</tr>
<tr>
<td>Tiago Videira</td>
<td>UNL</td>
<td>Jorge Martins Rosa</td>
</tr>
</tbody>
</table>

Additionally, one sponsored post-doctoral researcher visited UT-Austin for the fall semester of 2011 and intends to return in fall 2012. Dr. Alcimar Quieroz of ISCTE researches information society characteristics among Latin American countries.

Two visitors who registered as non degree-seeking students in the fall continued as students in spring 2012. Three additional doctoral visitors joined them January 2012 to attend spring courses.

Doctoral Students in Residence, Spring 2012

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Advisor</th>
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</thead>
<tbody>
<tr>
<td>João Beira</td>
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<td>Carlos Guedes</td>
</tr>
<tr>
<td>Marta Feraz da Conceição</td>
<td>UNL</td>
<td>António Câmara</td>
</tr>
</tbody>
</table>
UT Austin doctoral student João Beira, who is pursuing a dual degree, successfully completed his comprehensive exams in the spring. He returned in fall 2012 to continue his progress towards his doctoral degree.

**Digital Media Internship Program**

The UT Austin | Portugal Digital Media Leadership Program has brought many talented Portuguese graduate students and early career professionals to Austin to intern for innovative digital media companies and to take advantage of opportunities to perform innovative research in the field. To date, the program has brought 13 interns to Austin. Below is a list of the fall 2011/spring 2012 interns, as well as results from a survey of 2011-12 DMLP participants evaluating the effectiveness of the program. The survey items range in value from “1” (poor) to “5” (very good).

<table>
<thead>
<tr>
<th>Ana Figuieras</th>
<th>UNL</th>
<th>António Granado</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlos Figueiredo</td>
<td>U. Porto</td>
<td>José Azevedo</td>
</tr>
<tr>
<td>Frederico Gustavo Magalhães</td>
<td>U. Porto</td>
<td>Catarina Roseira</td>
</tr>
<tr>
<td>Afonso O’Neill</td>
<td>UNL</td>
<td>António Câmara</td>
</tr>
<tr>
<td>Isabel Paiva</td>
<td>UNL</td>
<td>António Câmara</td>
</tr>
<tr>
<td>Cláudia Silva</td>
<td>UNL</td>
<td>António Granado</td>
</tr>
<tr>
<td>Tiago Videira</td>
<td>UNL</td>
<td>Jorge Martins Rosa</td>
</tr>
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</table>

**Fall 2011 Interns**

Diana Castilho Santos (Mercury Mambo)
Rui Silva (“Trashdance” multimedia documentary)
Teresa Vieira (KUT, radio station)

**Spring 2012 Interns**

Vera Tavares (Mercury Mambo)
Pedro Resende (Fueled Films)
Filipa Rodrigues (KUT, radio station)
Mário Jacinto (KUT, radio station)
### DMLP 2011 Survey Results

<table>
<thead>
<tr>
<th>Statement</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>The program was well organized.</td>
<td>4.00</td>
</tr>
<tr>
<td>3 months was sufficient time for my internship experience.</td>
<td>3.00</td>
</tr>
<tr>
<td>My internship position fit well with my skills and interests.</td>
<td>4.00</td>
</tr>
<tr>
<td>The living arrangements were appropriate.</td>
<td>4.50</td>
</tr>
<tr>
<td>The DMLP internship expanded my conceptual skills.</td>
<td>4.36</td>
</tr>
<tr>
<td>The DMLP internship strengthened my technical skills.</td>
<td>4.18</td>
</tr>
<tr>
<td>The DMLP internship helped me network with others in my field.</td>
<td>4.55</td>
</tr>
<tr>
<td>I expect to maintain professional connections formed during my internship.</td>
<td>4.64</td>
</tr>
<tr>
<td>The DMLP internship contributed to my professional development.</td>
<td>4.82</td>
</tr>
<tr>
<td>The DMLP staff responded to inquiries in a timely manner.</td>
<td>4.33</td>
</tr>
<tr>
<td>The DMLP staff effectively answered participants’ questions.</td>
<td>4.56</td>
</tr>
<tr>
<td>The DMLP staff effectively arranged travel.</td>
<td>4.45</td>
</tr>
<tr>
<td>The DMLP staff was helpful in facilitating the visa process.</td>
<td>4.78</td>
</tr>
<tr>
<td><strong>My overall opinion of the DMLP is:</strong></td>
<td><strong>4.82</strong></td>
</tr>
</tbody>
</table>

### Summer Institute 2012

The Digital Media Program conducted its fourth annual Summer Institute in Portugal in Summer 2012. The Summer Institute features credit courses taught on a compressed schedule by UT Austin faculty. This year, the program offered two courses in Porto and four courses in Lisbon, in addition to two special courses taught by University of Texas faculty at Academy RTP, a professional development program organized by the national broadcast network of Portugal. Below are descriptions of the Summer Institute courses. All of the courses concluded by late July but as of early August, evaluations are still under way.

### Experimental Animation, Jeanne Stern, Porto

Students focused particularly on the representation of space in film and on visual motion in this course, rather than on traditional narrative. During the class sessions, students created animated microcosms with their own conceptual and material rules. In addition to learning...
animation techniques, students learned about the theory and history of experimental animation and video installation.

In the first week, the class produced group projects using novel techniques. They constructed a three-dimensional world out of paper, and this installation was used to create multiple short videos, including a stereoscopic (3D) slide show, and a moving camera piece. The class also included an exercise in “toy” animation using simple mechanical and optical devices.

Working in pairs, students then created animated “worlds” of their own. These projects were inspired by a variety of sources such as literature, maps, and botany. Student teams worked together to define the “rules” of their worlds, and to produce visual and motion studies. The course culminated in a public screening of students’ projects in downtown Porto.

Human-Computer Interaction, Luis Francisco-Revilla, Porto
This course offered a comprehensive view of the field of Human-Computer Interaction (HCI). Students developed their skills to envision and evaluate novel information interaction systems. To support this endeavor, they were assigned chapters and papers for reading outside of class and were expected to regularly submit written work and participate actively in class discussions.

Researching Digital Media Users, Joseph Straubhaar and Sharon Strover, Lisbon
This two-part course introduced students to basic research methods, relying on a social sciences methodological approach. The course considered issues of epistemology, conceptualization, and measurement, and then examined various research techniques including focus groups, interviews, surveys (online and offline) and field experiments, ethnography, and other Internet-friendly approaches. The course approach emphasized how scholars frame research questions and considered alternative assessment schemes for various research questions. Students were asked to write a brief research proposal during the course and complete several homework assignments tailored to specific methodologies and elements of research and analysis.

Cinematography Strategies for the Documentary, Steve Mims, Lisbon
This course taught students production and post-production concepts, strategies and techniques for creating advanced documentary projects. The class was structured around the creation of short collaborative documentaries shot in groups of two; students shot and edited a six-minute short during the course.
focused on filmmaking strategies to optimize visual and audio design by utilizing lighting, lenses and camera placement for both interviews and vérité filming. The post-production component focused on a contemporary streamlined workflow with particular emphasis on an editorial organization and decision-making. The class analyzed shooting and editorial decisions from successful documentary films for reference.

**Entrepreneurial Journalism, Rosental Alves, Lisbon**

Designed for journalism graduate students and professionals, this course focused on the importance of entrepreneurship for the future of journalism in the emerging media ecosystem that has been formed by the Digital Revolution. It addressed relevant lessons that journalists can learn from the startup companies’ culture that characterizes the development of digital technology companies. It also focused on the creation of innovative journalistic enterprises and initiatives including the creation of non-profit organizations and the development of projects within traditional media companies. The class studied the impact of digital technologies on the news industry, both in terms of content production and consumption. Special attention was given to the changes in business and distribution models and the ways people consume and produce news and information.

The historical evolution of the business of journalism was also examined, including the current challenges the industry is facing in adapting to the new media ecosystem. Through case study methods and testimonials of a few guest speakers, students were able to dissect journalistic initiatives based on innovative uses of digital technologies and then work on their own projects. The course culminated with the presentation of students’ projects of news enterprises for the digital age, including business plans, prototypes, and demos.

### Summer Institute 2012 Course Evaluations (5 point scale)

<table>
<thead>
<tr>
<th>Course</th>
<th>Instructor</th>
<th>Location</th>
<th>Enrollment</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Journalism</td>
<td>Alves</td>
<td>Lisbon</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Research Methods</td>
<td>Strover/Straubhaar</td>
<td>Lisbon</td>
<td>8</td>
<td>4.83</td>
</tr>
<tr>
<td>Cinematography</td>
<td>Mims</td>
<td>Lisbon</td>
<td>8</td>
<td>4.60</td>
</tr>
<tr>
<td>Experimental Animation</td>
<td>Stern</td>
<td>Porto</td>
<td>15</td>
<td>4.85</td>
</tr>
<tr>
<td>Human-Computer Interaction</td>
<td>Francisco-Revilla</td>
<td>Porto</td>
<td>9</td>
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</tr>
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**Academy RTP, Stuart Kelban and Richard Lewis, Porto**

Kelban and Lewis led classes in scriptwriting at the Academy RTP, a Rádio e Televisão de Portugal transmedia program that gives young interns and professionals the opportunity to develop and distribute their projects with their peers and take workshops conducted by a range of media experts. In Lewis’s course “Collaborative Screenwriting” students brainstormed story ideas, using character sketches and other preliminary work done by the students. The class subsequently developed outlines and scripted scenes for two potential television series and four
potential feature films. Kelban's course “Writing the Short Script” explored the fundamentals of narrative storytelling and helped students apply these principles, developing their own original short screenplays.

Academy RTP 2012 Course Evaluations (5 point scale)

<table>
<thead>
<tr>
<th>Course</th>
<th>Instructor</th>
<th>Location</th>
<th>Enrollment</th>
<th>Score</th>
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</thead>
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<td>Writing the Short Script</td>
<td>Kelban</td>
<td>Lisbon</td>
<td>10</td>
<td>4.75</td>
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<tr>
<td>Collaborative Screenwriting</td>
<td>Lewis</td>
<td>Lisbon</td>
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**Additional Educational Activity**

**Film and Media Scoring, U. Porto, Bruce Pennycook and Carlos Guedes (Full semester course)**

UT professor Bruce Pennycook co-taught with U.Porto professor Carlos Guedes a class on “Film and Media Scoring” at the University of Porto during the spring semester 2012; as part of the course, Pennycook travelled to Porto in March to conduct an intensive week of classes. Comprised of morning and afternoon sessions, the class first introduced students to concepts related to scoring. Students then had the opportunity to engage with the material in hands-on projects in the afternoon. Students used software such as Apple Logic to develop their ideas for a final project recorded at the course’s conclusion.

**Audio-Visual Lab, Geoff Marslett, Lisbon (Full semester course)**

UT lecturer and award-winning animator Geoff Marslett spent the spring semester in Lisbon teaching a special course for doctoral students. “Audio-Visual Lab” gave advanced PHD students an opportunity to work on technical production skills as well as narrative skills. All students worked on presenting non-fiction material through animation, gaining a basic understanding of Adobe post-production software, creating an animated self portrait, and then used these skills to create a series of short stories, a non linear story, a longer narrative, or aid in the assembly of the other projects into one cohesive web presentation. Students developed their own projects to suit their research topics.

**Music Composition, Russell Pinkston, Porto (Class Visit)**

In October 2011, UT Butler School of Music professor Russell Pinkston traveled to Porto to engage with digital composition students. At U.Porto, Pinkston conducted a weeklong intensive workshop with students of professor Carlos Guedes on the musical programming environment Csound.
**ZON conference, Lisbon, October 2011**

One of the program’s major corporate partners, ZON, held an event in Lisbon to address its work with the Digital Media Program. Titled “Evaluating the ZON UT Austin Experiment: Two years of business-university cooperation in the development of script-writing and digital animation competencies,” it was held at Universidade Lusófona de Humanidades e Tecnologias on October 20th.

The event gathered participants from the summer 2010 ZON Intensive Script Development Lab and the summer 2011 ZON Digital Animation Advanced Lab at UT Austin, representatives from ZON, and staff from the UT Austin | Portugal program.

The collaboration between ZON and the UT Austin | Portugal Program has brought 28 candidates and winners to the University of Texas at Austin and supported the completion of about 15 projects of fiction and animation. One highlight of the collaboration is the short film "Vicky and Sam" produced in Austin by Nuno Rocha, winner of the ZON Creativity in Multimedia Award 2008. Rocha’s work has received awards in various national and international events, including the Zacuto (USA), Shortcutz, Caminhos do Cinema Português, and Ovarvídeo festivals. Pedro Resende, a former intern hosted by the program in Austin, won the 2010 ZON Creativity in Multimedia Award for film. His winning film “Maybe” was shot in Austin and has gone on to be featured in a number of festivals throughout Europe and North America. Resende returned to Austin in spring 2012 to continue filmmaking.
BUILDING CAPACITY

In addition to its efforts in research and education, the UT Austin | Portugal Digital Media program has cultivated relationships with members of the international media community including prominent scholars, policy experts, activists, and artists. In doing so, the program has drawn attention to Portugal's creative industries and academic talent and has fostered environments where Portuguese scholars and entrepreneurs may build networks with internationally renowned members of the digital media scene and meet with other members of the Portuguese digital media community. One of the primary venues for these efforts has been the Future Places Festival, which has drawn speakers, performers, and participants from around the world.

Future Places Festival, Porto, October 2011

The fourth annual Future Places festival hosted community workshops, technology labs, digital media art exhibits, performances, and more from October 19-22 in Porto. In order to tie the Festival more closely to the doctoral programs, the festival hosted an all-day doctoral symposium in which students of the UT Austin-Portugal program shared their projects and research. Pedro Branco from the University of Minho organized an exhibit of student interactive work as well, drawing on the network of talented students who make up the UT Austin | Portugal Digital Media program’s student community. The Festival is one way the program works toward its goal of making Digital Media more responsive to the larger community of students, and giving these students a sense of investment and ownership.

The 2011 festival also focused on the continuation of existing community projects that appeared in previous festivals, and on panels that addressed copyright, one of the most important issues in digital media today. Festival organizers brought two international speakers to keynote the event, Elizabeth Stark (Stanford University, USA) and Peter Sunde Kolmisoppi (The Pirate Bay, Sweden).

As in previous years, Future Places offered practical, hands-on technology labs. Jeanne Stern, an MFA graduate of UT Austin and award-winning artist, taught a course titled Experimental Animation: Ghosts of Spaces. Over two days, participants used a variety of media to create innovative animated films that were later presented at the festival. Brett Caraway, a recent PhD graduate of UT Austin, led another intensive lab, where he introduced participants to Blender,
an open-source 3D modeling application. Participants’ projects, developed during two intensive days of instruction, were also later presented.

Citizen Labs were a series of workshops curated by Heitor Alvelos. The sessions focused on social and cultural participation through new media, and were very well attended. Most Labs were organized in coordination with various festival partners, such as the Paredes Municipality, Asociación Cultural Visible, or Radio Zero. This supported a key aspect of the festival’s mission, building bridges among community groups.

The doctoral symposium featured over a dozen theoretically and technically innovative projects currently conducted by UT Austin-Portugal Digital Media PhD students from UNL and U.Porto. Many faculty and students gathered to learn about research on haptic art, tools for automated music generation, and interactive video systems supporting environmental activism, among many other topics. The symposium provided a snapshot of the diverse cutting edge research and technological development occurring within the doctoral program and gave students from the partner universities an excellent opportunity to engage with one another.

The exhibition, curated by Branco (University of Minho), showcased some of the best media art currently being produced in advanced degree programs in new media within various Portuguese universities. Various installations were displayed at Maus Hábitos, one of Porto’s leading community cultural spaces, inviting visitors to interact, discuss and think of digital media as a driving force for creative development and innovation.

The festival hosted several prominent speakers on digital media and copyright, including activists, educators, and policy experts. Elizabeth Stark, a Lecturer in Law at Stanford Law School, where she started the “Ideas for a Better Internet” program, gave a keynote address at the opening of the doctoral symposium, where she and other audience members gave feedback on students’ projects. Stark is a Visiting Fellow at the Yale Information Society Project and has extensive experience in free culture advocacy, co-founding the Open Video Alliance and serving as a producer of the annual Open Video Conference, which is dedicated to promoting free expression and innovation in online video.
On its final day, the festival featured morning and afternoon discussions on digital media and copyright. Stark appeared in a panel with Peter Sunde Kolmisoppi, co-founder of internationally renowned BitTorrent indexing site The Pirate Bay. Stark and Sunde addressed The Pirate Bay’s development, industry and government reactions to the site, and, more generally, shifting attitudes and conditions surrounding intellectual property and digital media.

Another panel focused on copyright featured Teresa Nobre, Legal Project Lead of Creative Commons Portugal, Gregg Perry, a faculty member teaching Digital Media Management at Austin’s St. Edward’s University, and Sérgio Branco, a professor of intellectual property law at Fundação Getulio Vargas in Rio de Janeiro, Brazil. The international panel presented a discussion on “Copyright, Creativity, and Change,” addressing emerging trends in intellectual property including digital content industry strategies and developing models of free culture. The three speakers were also featured at the University Technology Enterprise Network’s Copyright Workshop for the Creative Industries in Porto, which directly preceded the festival. Professor Sharon Strover of UT Austin moderated the panel. The copyright sessions attracted large crowds of interested festival participants and resulted in highly engaged discussions among speakers and audience members.

Yet another key festival address was presented by Portuguese cultural collective GANA, the authors behind Bruno Aleixo, an increasingly popular virtual character who has appeared on various mainstream media outlets in Portugal. The talk explored new paradigms in media production and consumption via digital media through aesthetic appropriation, online communities, brand subversion, historical references and the use of humor to convey issues of local identity.

Overall this was the most successful edition yet of Future Places in terms of attendance, engaged community participation, and the scope of proposed activities.
OTHER ACTIVITIES

U.Frame Media Festival, Porto, October 2011
The U.Frame International Academic Film Festival is an annual event held in Porto and Galicia and is sponsored by universities in Brazil, Singapore, the US and Spain. UT Austin has participated in the festival for the past four years by providing faculty jurors and speakers, as well as student entrants.

In October 2011, four students from U.Porto had work accepted to the program, in addition to five UT students and alumni. All screened films at the festival, and three students from UT-Austin attended the event. The submission from UT Austin alumnus Soham Mehta was given the award for “Best Fiction.”

M4M Music for Media Lecture Series
Carlos Guedes of the University of Porto received funding from the European Union to organize a series of lectures addressing the current impact of new media in music creation and production. The series, which began May 17, features performances in addition to an international array of music authorities. Speakers include Pedro Rebelo of the Sonic Arts Research Center of Belfast; Bruce Pennycook of the University of Texas at Austin; Clarence Barlow of the University of California, Santa Barbara; Hans Timmermans of the Utrecht School of Arts; Ricardo Climent of the University Of Manchester; Sally Jane Norman of the University of Sussex; and Robert Rowe of New York University.