An **Human Computer Interaction innovation institute** as defined by the statutes of the University of Madeira and established as an independent non-profit R&D organisation whose founding members are the University of Madeira, Madeira Tecnopolo SA and Carnegie Mellon University.

Established in 2010.
Overview

Portugal President Oct. 15

EC Carlos Moedas 23/3/16
to research, enable, design and create transformative experiences that empower people to lead the best possible life in harmony with their environment.
our mission

[Norman after Rogers]

Design Fictions challenge narrow assumptions, preconceptions and givens about the role products play in everyday life.

[Hight Technology]
consumers want more technology, better performance

[Consumer Commodity]
consumers want convenience, ease of use, reliability, good design, low cost

[Transition point where technology satisfies basic needs]

Product performance

Relative % of customers

[Consumer Commodity]

[Dunne & Raby]
MAIN FIELDS OF RESEARCH

- Human Computer Interaction
- Health – neurorehabilitation
- Social and Civic Media
- Applied science and human-centred technology
- Wireless networks
- Virtual and Augmented Reality
- Digital Media
- Serious Gaming
- Multimedia Storytelling
- Art and Design
- Small sensors: tracking and medical devices
- Energy – smart management
- Green power generation
- UX and Service design
- Ubiquitous computing
- Ecological IoT
We are providing an unique opportunity for students to have a new intercultural experience...

146 students
14 post-grad students
124 MsC students
23 in CMU programs
18 PhD students
(data end 2015)
working with other institutions at the national and international level…
M-ITI has placed alumni in high profile jobs

Companies: PT, Google, Microsoft, frog, GE Global Research, NVIDIA, logica, eBay, IBM, vmware, Novabase, BlueCross BlueShield, HP, NOKIA, THOMSON REUTERS, BOSCH, CGI, R/GA, Modern Climate, Science4you.
M-ITI Numbers Evolution 2010 - 2015

<table>
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<tr>
<th>Category</th>
<th>2010</th>
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<th>2014</th>
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<td>Citations (from Google Scholar)</td>
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<td>Active Funded Projects</td>
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<td>Research Outputs (publications)</td>
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<td>41</td>
<td>60</td>
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</tbody>
</table>

M-ITI in Numbers 2010 - 2015

- Total number of citations: 6683
- Research Projects where M-ITI has been involved: 73
- Research publications: 659
- Researchers in Projects: 211

Research output
**EVOLUTION OF M-ITI STUDENTS 2010 - 2015**

<table>
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<tr>
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<tbody>
<tr>
<td>PAHT Bridging-program on Human Aspects of Technology</td>
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<td>MEI MSc in Computer Science</td>
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<td>MHCI Master in Human-Computer Interaction</td>
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<td>MET Master of Entertainment Technology</td>
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<td>8</td>
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<td>DEI PhD in Computer Science</td>
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<td>25</td>
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</table>

**Enrollments in M-iti’s educational programs**: 844

**Educational Programs**: 6

**Graduated students**: 245

**Different Nationalities among Students**: 42
Christopher Csikszentmihályi appointed ERAChair of HCI and Design Innovation

1st ERAChair in Portugal
Budget 2.3M euros
A multi-disciplinary Center combining natural and social scientists, engineers, humanists, and artists, its output will be focused on the area of applied science and human-centred technology.

#1 invent new design techniques

#2 investigate how nature and communities are affected by natural, political, and economic global pressures

#3 develop personal, business, scientific, and civic technological platforms

showcasing the advantages of research and design situated outside of global capitals
#1 - technology is politics by other means
#2 - the politics of most technologies are socially regressive because they are made by the most powerful entities in the world - governments and corporations
#3 - technology is personal and geopolitical, sometimes both at the same time
#4 - most technologies configure their users as a consumer not a citizen

Afghan explorer
showcasing the advantages of research and design situated outside of global capitals, including active research in and with the global south for which Madeira is one of the outposts for transnational EU cooperation
Work in Uganda to develop personal, business, scientific, and civic technological platforms for better understanding and situating actions, choices, and self in a global perspective.
Our goal is to create two small technical demonstrations: one short animation, the second an interactive experience.

Eco-Marino is a fun free roaming underwater experience built in the Unity Game Engine and it allows three guests to act as an underwater litter cleaning team.

Pedro Candelária
Mário Dinis Pinto
Ashlyn Sparrow
Shibli Mansuri
António Gomes
Monique Park

http://www.etc.cmu.edu/projects/whale-museum/
O Faroleiro e a Espada, The Lighthouse Keeper and the Scabbard Fish, is a short animation with the goal of telling a story in a four screen room.

Ilha Musical is an interactive experience in which guests must help growing flowers and creating buildings to create a village of joy and beauty.
Our goal is to create an interactive exhibit the Casa da Luz electricity museum to provide an entertaining experience that simultaneously educates guests on the challenge of managing an isolated power grid, like the one on the Island of Madeira.

http://www.etc.cmu.edu/projects/powerhouse/
We want to raise the awareness of locals and tourists of Madeira about possible dangerous situations in levadas, helping them to prevent and/or respond accordingly to said situations.
GAMING FOR ENVIRONMENTAL EDUCATION: new ways of increasing the population’s awareness for environmental problems. The goal is to influence local population and visitors to choose environmental best practices to protect the ecosystem’s biodiversity and guarantee economic sustainability.

http://euphorbia.m-iti.org/be-eco-app/index_en.html
Team Promethean consists of four graduate students who joined Logica, a global consultant, to research and design an enhanced energy management interface for operators at the nation’s electricity distribution company, helping to detect faults and pinpoint causes.
We want to study how people's routines and social networking behaviors relate to their emotional states in order to design a solution that promotes their daily mental well-being using technology.

http://spark.m-iti.org/
What-a-Watt: Where does my electricity come from?
Ricardo Sousa won the Student Paper Award under a project, supervised by Professor Morgado Dias and M-ITI for the Telecommunications and Energy Network Engineering at the University of Madeira. The award was given during the conference "Electronic Imaging" in San Francisco, United States. Ricardo Sousa chose a thesis project proposed by AWAIBA Lda., and he developed the smallest digital sensor in the market.

This sensor can be used for endoscopies and invasive procedures such as brain tumor removal.
From traditional motor rehabilitation to interactive systems

- Personalized & Adjusted to patients’ abilities
- Intensive
- Independence in training
- Motivating
- Quantification of performance over time
- Adequate for home usage
Madeira Story Generator (MStoryG) is an interactive public storytelling installation designed to revive storytelling practices within public spaces. The Airport of Madeira was the chosen location for the MStoryG public installation using an old arrivals board.
Startups

m·iti
Madeira Interactive Technologies Institute
Mambu is an online portfolio management software service for growing microcredit organizations. It lets microcredit organizations outsource their technical challenges and allows them to focus on their core business: improving the lives of the poor by providing essential finance services such as loans.
prsma is a company created by a M-ITI team associated with an entrepreneur from the electronics industry, to commercialize “ENERGY SPECTRUM “, a system developed and tested in the framework of a success research project. Our team encloses experts in information technologies, energy, psychology and experience in entrepreneurship.

prsma was awarded with a European H2020-SMEINST-1-2015 grant.
Thank You!

José Luís Sousa Freitas  
Business Development Manager  
00351 96 203 26 51  
[www.m-iti.org](http://www.m-iti.org)  
jose.l.freitas@m-iti.org