ESTABLISHED 18.03.2005 BY THE ESTONIAN PARLIAMENT BY MERGING:

- Tallinn Pedagogical University
- Institute of Ecology
- Institute of Estonian Demography
- Institute of International and Social Studies
- Institute of History
- Tallinn Pedagogical College
- Baltic Film and Media School
- Estonian Institute of Humanities
- Academy Nord
- Estonian Institute of Future Studies
- Estonian Archive Museum of Pedagogy
- The Academic Library of Estonia
TALLINN UNIVERSITY
FOCUS FIELDS

THE DEVELOPMENT PLAN FOR 2015-2020

Educational innovation
Digital and media culture
Cultural competences

Healthy and sustainable lifestyle
Society and open governance
Since 01.09.2015

- School of Humanities
  - Estonian Institute of Humanities
  - Catherine’s College
  - Institute of Estonian Language and Culture
  - Institute of Germanic and Romance Language and Cultures
  - Institute of Slavonic Language and Cultures
- School of Natural Sciences and Health
  - Institute of Ecology
  - Institute of Mathematics and Natural Sciences (except Dep. of Mathematics)
  - Institute of Health Sciences and Sports
  - Institute of Psychology

- School of Digital Technologies
  - Institute of Informatics
  - Institute of Information Sciences
  - Department of Mathematics
- Baltic Film, Media, Arts and Communication School
  - Baltic Film and Media School
  - Institute of Fine Arts
  - Institute of Communication

- School of Educational Sciences
  - Institute of Educational Sciences
  - Pedagogical College
  - Center for Innovation in Education
FINANCING OF THE SCHOOLS

1. Financing of schools will motivate reducing teaching: 75% of the budget from previous year + 15% by achievements + 10% new initiatives.

2. Schools will rent the rooms from the university central administration: 3 or 9 €/month for 1 m².

3. For motivating R&D and offering continuing education: no (zero) overhead to the central administration.

4. There are university supported centers of excellence in each focus field.
SCHOOL OF DIGITAL TECHNOLOGIES

Academic areas:
- Applied Informatics (head: prof Peeter Normak)
- Digital Learning Ecosystems/Educ. Technology (senior researcher Kai Pata)
- Human-Computer Interaction (prof David Lamas)
- Information Sciences (prof Sirje Virkus)
- Mathematics and Didactics of Mathematics (assoc prof Madis Lepik)

SCHOOL OF DIGITAL TECHNOLOGIES

Laboratories:
- Interaction Design
- User Experience Evaluation
- Digital Learning Games
- Software Development
- Hardware Development
STUDIES

BACHELOR LEVEL CURRICULA

- Informatics (focus on software engineering)
- Information Sciences
- Mathematics
MASTER LEVEL CURRICULA (ESTONIAN)
- Information Sciences
- Management of Information Technology
- Educational Technology
- Teacher of Mathematics
- Teacher of Informatics, School IT Manager

MASTER LEVEL CURRICULA (ENGLISH)
- Human-Computer Interaction
- Digital Learning Games
- Open Society Technologies
MASTER LEVEL CURRICULA (ENGLISH, JOINT)

- Digital Library Learning – face-to-face, jointly with University of Parma (Italy)
- Interaction Design – online, jointly with Cyprus University of Technology (Cyprus)

DOCTORAL LEVEL CURRICULUM (ENGLISH)

- Information Society Technologies
COOPERATION WITH INDUSTRY (POLICY LEVEL)

1. Companies are represented in the council of the school.
2. The school represents the university in Estonian Association of Information Technology and Telecommunications (ITL).
3. The school is represented in Information Technology and Telecommunications qualifications committee (skills council) of Estonian Qualifications Authority.
4. Participation in the development of a 2030 vision for Estonia in IT.
5. Participation in the development of a roadmap for implementation of ICT in education (in Estonia).

COOPERATION WITH INDUSTRY (CURRICULUM DEVELOPMENT)

1. Involvement in initial curriculum development.
2. Companies are represented in curriculum councils.
3. Feedback from the companies (examples):
   • Questionnaires (to the graduates and to their bosses)
   • Seminars in the companies (one seminar a week).
4. Companies are always represented in graduation committees.
5. Companies are always represented in accreditation committees.
COOPERATION WITH INDUSTRY (LECTURES)

1. Examples of courses completely taught by industry experts:
   - ICT Strategic Management
   - IT Operations and Management
   - Agile Software Development

2. Examples of courses where some topics are taught by industry experts:
   - Development of Infrastructure of IT
   - ICT Procurements and Contracts
   - Programming of Applications

3. Experts from the industry are also used as (co-)supervisors and theses reviewers.

4. Seminars in the companies.

EDUCATION EVALUATION

<table>
<thead>
<tr>
<th>University</th>
<th>No of Strengths</th>
<th>Areas of improvement and recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tallinn University of Technology</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>University of Tartu</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Tallinn University</td>
<td>6</td>
<td>8</td>
</tr>
</tbody>
</table>

Self-Evaluation Report:

Expert Report:
MASTERS IN HUMAN-COMPUTER INTERACTION

WE EMPHASIZE TECHNOLOGY FOR THE BENEFIT OF PEOPLE!
Specialization

Free electives

Studies abroad

7/14/2019

(Cartoons by S. Iwasawa from Pfeifer & Bongard: How the body shapes the way we think)

Master thesis

Applied and basic research combined

Dual supervision

- Interaction aesthetics
- Tangible interfaces for music making
- Distributed music making
- New media art
- Eye-tracking and user experience
- Trust and engagement
- Wearables and well-being
- User-modeling and adaptation strategies
- Flow, gameplay and electroencephalograms

School of Digital Technologies
CURRENT AND RECENT PROJECTS

- EU funded “BrainHack: Bringing the arts and sciences of brain and neural computer interface together”
- COST funded network on “Algorithms, Architectures and Platforms for Enhanced Living Environments”
- NORDPLUS funded “COLLECTIVE DREAMING: Experimental Interaction Design course for non-ICT audiences”

CURRENT AND RECENT PROJECTS

- Estonian funded “GoProSocial: Neurocinematis System for Assessing and Training ProSocial Behaviours”
- Tallinn University funded “STARTS@TLU: A platform for art, science, technology and society partnerships: new approaches to design and development through research in the wild”
RESEARCH EVALUATION

- International research evaluation in educational sciences (2013): “The Panel thought especially notable the high quality, originality and international significance of the publications emanating from the Centre for Educational Technology...”.

- Expert assessment (2014): “This team is very active in the European landscape and recognized as an important actor ... They have the potential to become a leading team in Europe”.

MODELING TRUST

- As technology becomes seamlessly integrated and diffused within people’s day to day tasks, uncertainties and increasing dependency on technologies are evident.

- In this light, there is a need for deepening our understanding the role of trust in Human-Computer Interaction.
NEUROPHYSIOLOGICAL ART AS A RESEARCH TOOL TO EXPLORE AND STUDY NEW FORMS OF IMPLICIT HUMAN-COMPUTER INTERACTION

NEUROTHEATRE

- A specific type of interactive theatre where audience and actors can communicate through brain and neural computer interaction (BNCI) interfaces using multimodal sensors and actuators.

- This combines computer science, neuroscience, engineering, design, performative arts and biohacking, for instance.
BODY-CENTRIC INTERACTIONS
WEARABLE TECHNOLOGIES FOR A BETTER SELF

- The goal is to bring together knowledge from the domains of kinesiology, personal informatics, behavior psychology, human-computer interaction, and learning sciences into a united framework to be used to improve one’s well-being.
DESIGN FOR PEOPLE BY PEOPLE

- We focus on theory-informed, empirically-supported, development, application and evaluation of methods, including the adaptation of existing methods.

- Shaped on theory, we progress investigating hypotheses about the reasoning and practices of those involved in design processes, and then we shape theory.
WHAT ELSE?
There is starts.ee

There is also our course in experimental interaction design.
WINTERSCHOOL.TLU.E
E
SUMMERSCHOOL.TLU.
EE
AND OUR WORLD USABILITY DAY
CONFERENCES 2019 ONWARDS

- INTERACT 2019, The 17th IFIP TC13 International Conference on Human-Computer Interaction
- WUD Tallinn 2019, the 11th celebration of the World Usability Day in Estonia
- NordiCHI 2020, the 10th biannual Nordic forum for Human-Computer Interaction
THANK YOU!

David Lamas
david.lamas@tlu.ee