School of Computer and Communication Sciences

Martin Vetterli
Outline

• School of I&C
• Teaching
• Research
• TechTransfer
• Governance
• Conclusion
School of Computer and Communication Sciences

- 38 professors
- 487 B.S. students
- 210 M.S. students
- 257 Ph.D. students
I&C : Total number of students (BS and MS)

Total number of students I&C 2007-2011 (sources: SAC)

- 2007: 711
- 2008: 624
- 2009: 616
- 2010: 721
- 2011: Total 822

<table>
<thead>
<tr>
<th>Year</th>
<th>IN</th>
<th>SC</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>408</td>
<td>303</td>
<td>711</td>
</tr>
<tr>
<td>2008</td>
<td>363</td>
<td>261</td>
<td>624</td>
</tr>
<tr>
<td>2009</td>
<td>369</td>
<td>247</td>
<td>616</td>
</tr>
<tr>
<td>2010</td>
<td>429</td>
<td>292</td>
<td>721</td>
</tr>
<tr>
<td>2011</td>
<td>518</td>
<td>304</td>
<td>822</td>
</tr>
</tbody>
</table>

I&C Research Day / June 21st, 2012
I&C Research Grants

6 Advanced ERCs
(G. De Micheli, P. Fua, W. Gerstner, M. Odersky, A. Shokrollahi, M. Vetterli)

7 Starting ERCs
(G. Candea, C. Fragouli, M. Gastpar, Ch. Koch, D. Kostic, M. Pauly, M. Seeger)

Latest: Viktor Kuncak!
Promotions

Ayfer Ozgur has been appointed as Assistant professor in the Electrical Engineering Department at Stanford University.

Emmanuel Abbe has been recently appointed as Assistant professor at Princeton University.
I&C : Research

Past

Present

Future

mobile networks

graphics and vision

big data

data with graphical structure

cloud computing

energy
I&C : 5 NCCR proposals

Network Science

Director: R. Urbanke

TRUST

Director: J. Sifakis

Biometrics

Deputy Director: S. Vaudenay

Digital Humanities

Deputy Director: S. Suesstrunk
Interaction with industry

• Startups
  – Jochen Mundinger, founder of routeRANK, recognized by MIT Technology Review magazine as one of the world’s top innovators under the age of 35
  – Martin Odersky creates Typesafe to leverage on Scala
  – The NCCR MICS Spin Fund program helps creating further startups:
    • Bmob (parking-oriented data mining and modeling)
    • Kandou Technologies (increased bit rate on serial links)
    • Pix4D (aerial photogrammetry and mapping)
    • Vidinoti (social augmented reality)

• Logitech Daniel Borel Innovation Center at EPFL
• ELCA research unit at EPFL
• Credit Suisse Lab
• Nokia Lab
IC Success stories in the Press - April-June 2012

Jochen Mundinger, 32
Reducing the carbon footprint of travel
RouteRank

Go green: Being flexible with travel

New Croppola Site Makes Pictures Better for Free
Automatically Crops Photos

Over the past few years there have been a variety of products, services with other apps, and even some free site applications available on the web to help users make their pictures look better. Typically

Les mathématiques pour contrer la croissance énergétique de l'électronique
Ghislaine Bloch

Designing a Smart-Phone Alphabet for the Illiterate
Peanut farmers in India are helping to design a text-messaging app that could aid the many millions who can't read or write.

Communication aid: Paramesha, a farmer in Chennakeshavapura, displays a prototype application for illiterate farmers. The app helped spur the development of easySMS.
Nitin Meena
UN DETOUR PAR NEW YORK ;}
Gouvernance

Legislatif
• Conseil de faculté
• Commission d’enseignement

Excutif
• Management committee
• Comité administratif
• Coordination de l’enseignement
• EDIC
I&C Management Committee

• MC Members
  – Dean and a.i. Representative for Tech Transfer
  – Associate dean for Teaching
  – Associate dean for Research
  – Chief Information officer (planned)
  – Representative of the Faculty members
  – One representative of the Administration

• MC missions
  – Strategic and operational issues
  – According to the «Règlement de Faculté» (to be adjusted)

• Weekly meetings, reports at faculty meetings
Structure I&C Teaching

ENSEIGNEMENT
A. Schiper
Adjointe: S. Dal Mas
Secrétariat: P. Silva

DIR SECTION INF
B. Moret

DIR ADJ SECTION INF
P. Ienne

DIR SECTION SYSCOM
E. Telatar

DIR ADJ SECTION SYSCOM
S. Vaudenay

RESP PROMOTION BS-MS INF
A. Wegmann

Teaching Associates
J. Sam
J.-C. Chappelier

RESP. PROMOTION BS-MS SYSCOM
B. Rimoldi
Structure I&C Research

RECHERCHE
R. Urbanke
Adj. J. Bovay

EDIC
R. Urbanke
Adm. C. Degott

Information office
Awards, Prizes
Grants opportunities
J. Bovay

Gestion des données et Statistiques
J. Bovay

Faculty meeting 26.09.11/page 17.
Structure I&C Tech Transfer

TRANSFERT TECHNOLOGIE
M. Vetterli (a.i.)
Adj. J. Bovay

Key account manager for industrial collaborations
Company A: Prof. X
Company B: Prof. Y

Brevets, licences, start ups
Point de contact
SRI (Service Relations Industrielles)/ Alliance
Prof. TBN ??

Gestion des données et statistiques
J. Bovay
Structure Information Technology

Information Technology
TBA: CIO

Interaction with central
DIT
KIS
COPILSI

Web master
IT projects
Communications

SIFAC
L. Desimone
A few thoughts:
A few thoughts:

Le Contrat Social

- Tax Payer’s ChF
- Incoming Students
- EPFL
- Research
- TechTransfer
- Outgoing Students (all ranks)
EPFL, I&C and the “game”

1. Things that matter
   - Teaching
   - Research
   - Technology transfer
   - Service

2. Things that are counted
   - NCCR
   - ERC
   - Fellows
   - Various factors (from a to z)
A last thought
16th edition
School of Computer and Communication Sciences
21st June 2012
9:00 – 16:00
Polydôme

Trustworthy Computing

Security, Privacy and Trust in Information and Communication Systems
Thank you for your attention!