CSC Information meeting

December 13th, 2016
New employees

Welcome!!!
CST
Yu Yang, Research Engineer
Andrei Kramer, Postdoctor
Laeeq Ahmed, Ph.D Student
Hazal Koptagel, Ph.D Student

MID
Karey Helms, Ph.D Student
Charles Windlin, Ph.D Student

RPL
Jesper Karlsson, Ph.D Student
Vladmir Li, Research Engineer
Jonatan Mänttäri, Ph.D Student
Thomai Stathopoulou, Ph.D Student
New Faculty

Professor
• Anders Friberg, in Computer Science, with spec. in Music Communication

Associate professor
• Gabriel Skantze, in Speech Technology with spec. in dialogue systems

Assistant professor
• Elina Eriksson, in Human Computer Interaction, spec. in sustainability
Rector contract negotiation

Supporting grant for 6 new faculty positions:

• 2 associate professors in Computer Science
• 1 Associate professor in Computer Science specialized in Software Technology
• 1 Assistant professor in Computer Science Specialized in Software Technology
• 1 Associate professor in Media Management
• 1 Associate professor in Media Technology spec. Media Production
Other positions currently under recruitment

- Professor in Software Technology (WASP) (34)
- Professor in Computer Vision (WASP) (Called)
- Associate professor in Communication (Advertised)
- Associate professor in Interaction Design (29)
- Assistant professor in Technology Enhanced Learning (21)
- Assistant professor in Machine Learning (To be advertised)
Rector’s management Advisory Board

Rector: Sigbritt Karlsson
Prorector: Mikael Östling
Vice rector for research: Annika Stensson Trigell
Vice rector for equity: Anna Wahl
Vice rector for global relations: Stefan Östlund
Vice rector for sustainability: Göran Finnveden

Dekanus: Katja Grillner
Prodekanus: Per Berglund
Förvaltningschef: Anders Lundgren
THS ordförande

Rector’s ledningsgrupp has become rector’s strategic advisory board
NADA – Numerical Analysis and Computer Science at Stockholm University

- We have hosted NADA at Stockholm university at the school since the beginning
- Stockholm university now wants to build its own competencies and reorganize the activities
- A strong and good collaboration will continue
- Will come into effect at the earliest from 2017/2018
- All affected staff are parts of the planning
A sustainable work environment – New policy: Code of conduct
The Code is a guide and a tool in day-to-day, ongoing operations at KTH.

Its purpose is to create a good working environment and to clarify employees' responsibilities and what is expected of every employee and fellow worker.

Background:
- Strengthened legal requirements on employers with regard to organizational and social working environment (AFS 2015: 4)
- The results from the employee survey
- Reports of discriminations, harassments increases at KTH-level
Extracts… “As a KTH employee or fellow worker, I agree to the following: “

• I always lead by example, use a professional approach in meetings and in my communications. I treat all employees, students and other collaboration partners with respect and consideration, regardless of gender, gender identity or expression, religion or other belief, social background, sexual orientation, disability, ethnicity or age.

• I understand the importance of a good working relationship with my colleagues and with my manager and I take responsibility for my working tasks, my work and its quality.

• I contribute to, and work consciously for, a good working climate. I react and inform my immediate manager, another manager, the HR function, the health and safety or union representative if I perceive that there is discrimination, harassment, sexual harassment or degrading treatment occurring among my colleagues and/or students. I am aware that my contribution to the work for a good working climate may affect my individual salary level and/or career development.

• I am aware that discrimination, harassment, sexual harassment, degrading treatment or offences against the KTH basic value platform and KTH guidelines may result in disciplinary action and in extreme cases to a police report and/or dismissal from my job or connection with KTH.

• I respect the fact that my immediate manager, as employer representative, has the responsibility to lead and distribute the work of the relevant employees within the framework of the conditions prevailing at our workplace and within our research.

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Salary review 2016 – soon done

➢ Employed at KTH, 1 October 2016.
   Excluded are employees that already have 2016 year's salary and PhDs that follow the "ladder".

➢ New salaries will be valid from 1 October 2016 and probably paid in December 2016.

Process:
• All employees have been offered a Salary Dialogue (lönesamtal) with their manager to evaluate last year’s performance.

  • Members in Saco have had an individual Salary Review Dialogue (lönesättande samtal) with their managers.

  • Members in STs new salaries have been negotiated at a central level.

Next step:
Both members in ST and employees non-organized will be informed about their new salaries.
Education in CPR* and heart starter

Two opportunities:
10 of January 9-12 place 527 (F0) Lindstedtsvägen 24
17 of January 9-12 place 304 (22:an) Teknikringen 14

Book online, info can be found on the CSC intra
http://intra.csc.kth.se Max 12 people per occasion.

*CPR = Cardiopulmonary resuscitation
Departmental visit by ergonomist

Each department will be visited by an ergonomist. In order to know that people are interested and are in, or want to meet a ergonomist but cant the specific date fill in the doodle that you find on http://intra.csc.kth.se.

Save the date:

- Stab 2017-01-26
- CST 2017-01-31
- MID, CESC 2017-02-02
- PDC 2017-02-06
- RPL 2017-02-08
- TCS 2017-02-13
- TMH 2017-02-15
3-day course on IPR* and Commercialization in January 2017

Petter Ögren

*IPR = Intellectual property rights
Course content

Seminar 1
"Basic knowledge about Intellectual Property Rights"
Date and time: **January 11, 13:00-16:00**
Place: "Fantum" at Lindstedtsvägen 24
Presenter: Mats Nordenborg, PRV
*This seminar will give you an introduction to Intellectual Property Rights (IPR) and how different aspects of IPR are relevant to academic research. There will also be an overview of the international systems relevant to IPR.*

Seminar 2
"How to find useful information from patents within your research area"
Date and time: **January 12, 13:00-16:00**
Place: "Fantum" at Lindstedtsvägen 24
Presenter: Christin Wendel, PRV and Rosa Lönneborg, KTH Library
*This seminar will give you knowledge about patent databases available at KTH and how to search for patent information and find relevant technical information within your research area from the patent literature. Bring your own computer to the seminar.*
Seminar 3
"Commercialization of research results"
Date and Time: **January 16, 13:00-16:00**
Place: "Fantum" at Lindstedtsvägen 24
Presenter: Gustav Notander, KTH Innovation

The seminar will give an overview of different aspects of commercialization of research results and how an inventory of Intangible Assets within a research project can be performed.

Please register via this link, *no later 6/1-2017*: goo.gl/GRGTPK
Olov Engwall
CSC LUNCH TALKS
for our students

Thank you all!

Wish to contribute next time? Please tell us!
### What do researchers at CSC actually do when they don’t teach?

| CST: Brain Like Computing, | Pawel Herman,  
| Social Robotics (FurHat), | Gabriel Skantze,  
| From Big Data to Insight, | Tino Weinkauf,  
| The Glory of the Human Voice, | Sten Ternström and Andreas Selamtzis,  
| Making Robots Understand Space and Time, | Patric Jensfelt och Nils Bore,  
| Breaking Isolation Using Cache Attributes, | Roberto Guanciale,  
| Autonomous Robots Making Correct Decisions, | Jana Tumova,  
| Complexity Theory and Approximation, | Johan Håstad,  
| The Future of Media, | Malin Picha Edwardsson,  

**Collaboration:**
GRU, CSC departments, Data- och Mediesektionens studienämnder and the Dean’s office.

SCI will now adopt the same scheme!
Quite positive answers regarding international recruitment

"KTH has managed to develop and improve the recruitment process even further. Starting from a high level of process ratings in 2014, many aspects have improved since then."

More about this during the spring, when Christian Todoran will give more details about the survey from the CSC perspective.

In the meantime: Thanks to all at Utbildningskansliet, not least Christian Todoran, Patrik Gärdenäs, and Anna-Lena Hållner, who are putting in large efforts to recruit and welcome international students.
CSC Pedagogical development projects

Apply now!
Have a look in Numera and CSC intra for details.
http://intra.csc.kth.se

Deadline January 10th 2017.
MOOC

Johan Jansson
KTH MOOC Steering Committee selected our proposal "High performance finite element modeling" based on our FEM material and FEniCS software.

**Project team:** Johan Jansson (project leader), Johan Hoffman and Niclas Jansson.

[https://drive.google.com/file/d/0B1wkIAd55fI0GhVVX1neEFxNms/view](https://drive.google.com/file/d/0B1wkIAd55fI0GhVVX1neEFxNms/view)
Centralisation of IT-services at CSC

Mattias Wiggberg, Jan Gulliksen
Legacy

Finished

• Staff transferred
• Offices moved
• Infrastructure (servers etc.) moved
• Servers/services moved

What is left to do

• Find owners to all servers/services that are running

Lessons learned

• It was possible
• All former staff at systemgruppen are still employees at KTH. Some of them have more superior positions today.
• Huge cost reductions.
## Economic effect

### IT-Costs ITA, from July 2016 (whole year)

<table>
<thead>
<tr>
<th>IT-tjänster CSC - 20161004</th>
<th>Summa tjänst/år:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lokal IT-support</td>
<td>941 486</td>
</tr>
<tr>
<td>Applikationsdrift/Webbdrift/Övriga tjänster (Backup osv.)</td>
<td>936 201</td>
</tr>
<tr>
<td>Telefoni</td>
<td>810 000</td>
</tr>
<tr>
<td>Licensadministration</td>
<td>187 240</td>
</tr>
<tr>
<td>Inköp och logistik av IT-relaterad utrustning</td>
<td>549 200</td>
</tr>
<tr>
<td>Programbiblioteket</td>
<td>450 000</td>
</tr>
<tr>
<td>KTH Windows</td>
<td>921 600</td>
</tr>
<tr>
<td>KTH Mac</td>
<td>597 600</td>
</tr>
<tr>
<td>KTH Ubuntu</td>
<td>669 600</td>
</tr>
<tr>
<td>Datoratsal- och resurs-datorer (ej IKT)</td>
<td>964 800</td>
</tr>
<tr>
<td>LAN/Sunet tjänster:</td>
<td>783 504</td>
</tr>
<tr>
<td>Co-location:</td>
<td>540 000</td>
</tr>
<tr>
<td>Beredskap:</td>
<td>15 000</td>
</tr>
<tr>
<td>Serverdrift:</td>
<td>1 602 000</td>
</tr>
<tr>
<td>Serverkapacitet:</td>
<td>33 192</td>
</tr>
<tr>
<td><strong>Summa:</strong></td>
<td><strong>9 191 423</strong></td>
</tr>
</tbody>
</table>

### IT-Costs CSC 2013 (whole year)

<table>
<thead>
<tr>
<th>Systemgruppen 2013 (länder uppräknade med 2,5 % / år)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 211 193 Personal 2013 uppräknat med 2,5 % per år</td>
</tr>
<tr>
<td>1 926 669 Lokaler</td>
</tr>
<tr>
<td>1 315 705 Utrustning och avskrivningar</td>
</tr>
<tr>
<td>262 694 Resor och drift övrigt</td>
</tr>
<tr>
<td>222 724 Programlicenser</td>
</tr>
<tr>
<td>801 010 WIKS</td>
</tr>
<tr>
<td>802 600 LAN o Sunet</td>
</tr>
<tr>
<td><strong>Summa:</strong></td>
</tr>
</tbody>
</table>

### DEFINITIV förändring 2013 -> 2016

-7 351 171 kr  
-44,4%

### MÖJLIG ytterligare förändring när serverlistan betats av

-2 190 192 kr  
-13,2%
Where did the money go?

- Increased base funding (+17% 2016)
- Increased funding for undergrad education/GRU
- Decreased overhead/täckningsbidrag

<table>
<thead>
<tr>
<th>% på löner och stipendier för</th>
<th>vt 2016</th>
<th>skillnad</th>
<th>2015</th>
<th>2014</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>KTH-gemensamma kostnader</td>
<td>24.46%</td>
<td>-0.76%</td>
<td>25.22%</td>
<td>25.42%</td>
<td>25.78%</td>
</tr>
<tr>
<td>Skolgemensamma kostnader</td>
<td>25.40%</td>
<td>-1.31%</td>
<td>26.71%</td>
<td>26.85%</td>
<td>27.70%</td>
</tr>
<tr>
<td>Totalt TB KTH och skola</td>
<td>49.86%</td>
<td>-2.07%</td>
<td>51.93%</td>
<td>52.27%</td>
<td>53.48%</td>
</tr>
</tbody>
</table>
Ongoing development

IT-department would like to serve KTH staff with feasible IT-solutions. Discussions with IT-department regarding:

• service level,
• how we would like to get support, and
• future services to implement

Ideas? Comments? -> service@csc.kth.se or your local representative in IT-council/IT-rådet.
VR Grants
CORALL – Collaborative Robot-Assisted Language Learning

Olov Engwall
Take the one question survey about relevant tasks: tinyurl.com/corall-task
Motion Representation Learning for Intelligent Surveillance (MoRLIS)

Atsuto Maki, RPL/CSC
MoRLIS: Motion Representation Learning for Intelligent Surveillance

Aim
To design a framework of video analysis that realizes "Pre-emptive video surveillance system."

I.e. detecting suspicious human behaviour in station/shopping mall/residence area (to protect us from threats in advance).

Challenges in motion perception
Describing complex motion in a natural environment; how to generate motion representations in the presence of cluttered background and/or significant scale changes.
MoRLIS: Motion Representation Learning for Intelligent Surveillance (cont.)

Research question

*How can we mathematically formulate the problem of representing complex motion in natural environment?*

Basic strategy

*Learning* motion representations from large-scale data set: *transfer learning of motion*, based on Deep Learning, extending the recent advances on image recognition by convolutional networks (ConvNets) with temporal dimension.

Image → ConvNets → Global image descriptor
Video → Extended Network → Motion representation
EquestrianML: Machine Learning Methods for Recognition of the Pain Expression of Horses

Hedvig Kjellström
Goal: Wellbeing of horses
Monitor and detect signs of pain
Problem 1: Horses are prey animals
Will maintain a “stiff upper lip” in the presence of humans

Problem 2: Human-horse time is limited
Manual monitoring not possible at all times
Solution: Automatic monitoring
RGBD camera and Machine Learning framework
BFUF - R&D Fund of the Swedish Tourism & Hospitality Industry
- 1.7 MSEK
- 2 Years
- 4 Partners

Mixed Reality Stockholm
- AR Guided Bus Tours
- AR Guided Walking Tours
- MR Guided Museum Tours

Research Questions:
- User Consumption Experience
- Extended Museum Experience
- User-generated Content
EU Project

Johan Hoffman
MSO4SC [H2020-EINFRA-2016-2017]

CSC: Johan Hoffman, Johan Jansson, Niclas Jansson,…

Mathematical Modelling, Simulation and Optimization (MSO) for Societal Challenges with Scientific Computing
Pan-European network EU-MATHS-IN: MSO+ICT (EU-MATHS-IN.se) + cloud computing industry (Atos) + supercomputing centre (CESGA) + software developers

e-infrastructure: integrated MSO application catalogue containing models, software (FEniCS,…), validation and benchmarks; and the MSOcloud: a user friendly cloud infrastructure for selected MSO applications

Pilots: marine based renewable energy, urban air quality, neuro-degenerative diseases, nuclear magnetic resonance,…
Opening hours at the Service Center during the Christmas holiday:

The Service Center Reception is open 28/12, 2/1 and 4/1 from 10:00 - 11:30.

We are closed between 23/12 and 6/1.

Ordinary opening hours from 9/1, that is 8:00 to 16:00.

You can always reach us by e-mailing service@csc.kth.se or visit us on the 4th floor at Lindstedtsvägen 3.
Don’t forget to register your christmas gift card at intra/CSC
För digitalisering i tiden

Digitaliseringskommissionens slutbetänkande

SOU 2016:89

Seminarium den 15/12, klockan 10.30 i F3 på KTH
Merry Christmas
& Happy New Year!!!