Dear colleagues,

This week, the cyber attack on one of the main Norwegian companies, Hydro, has been dominating the news. This has once more reminded us the necessity to educate competent and highly skilled IT experts, not only in information and communication security but also security and reliability of software. At our department, together with Simula-UiB, we are offering information security studies at each of the three levels: bachelor, master, and ph.d. At the same time, our course on software security is a mandatory part of several of our programs. Unfortunately our education in this direction, especially at the master level, does not seem to be visible nationally. I was quite disappointed to see that the annual national risk assessment report from the National Security Authority, RISIKO 2019, only mentions the master education in information security at NTNU Gjøvik. Together with the dean of our faculty, I have now invited the National Security Authority to Bergen, so that we can present for them our research, our education, and our students at all levels. I hope they will accept our invitation. On the positive side, we have several very exciting recruitments going on in our Selmer center for secure and reliable communication, and we are aiming to take that opportunity to make some publicity about our research and education when the contracts are all signed.

To mention some good news, we have a lot of great activity happening in artificial intelligence, machine learning and data science these days. Our Center of Data Science – CEDAS – has already generated substantial research collaboration both between the groups of our department and with other departments, thanks to the great efforts by our Helwig Hauser. Our machine learning group is organizing a workshop to gather all machine learning groups in Bergen, with a lot of researchers from our university, HVL, NORCE, MRI, companies, and other universities in Norway. I am impressed and very happy to see the large number of participants and the great interest and enthusiasm that our Ketil Malde has managed to generate for this event across a large variety of research groups. Last but not least, a group of researchers from our university is going to participate in the kick-off conference of NORA on April 1. NORA is finally getting operative with researchers from all partner institutions getting to meet each other at this event, at which we will also be presenting the very fresh CEO of NORA, whom we believe will become highly visible figure in Norwegian research. Finally, the minister of digitalization, Nikolai Astrup, will also be present at NORA’s kick-off conference, and he will spend two hours interacting with the researchers to get their feedback for the upcoming national strategy on AI. We have a lot of exciting things to look forward to!

I wish you all a very nice weekend!

-Pinar
Congratulations Lilya!

Congratulations to Lilya as an elected member of Norwegian Academy of Technological Sciences.

Norsk informatikkolympiade

27 high school students participated in the final in Norsk informatikkolympiade last week, hosted by our department and chaired by Torstein Strømme.

The students had 5 hours to finalize 4 tasks and their results were impressive! Learn more here.

The six best participants will represent Norway in the Baltic Olympiad in Informatics in Estonia 27 April – 2nd May.

As part of the social program, the students participated in the Escape-room "The Evil Rain Machine", and broke their record by 31 minutes!

Next Faculty and Staff lunch is on Thursday 4th April

We will meet in the lunch room on the fourth floor at 12:00 as usual. During this lunch we will celebrate Igor’s 60th birthday, and thus there will be cake, too!

Department of informatics Solstrand gathering, April 29-30

Please register here by 10th of April

The preliminary program is now ready!

Here you will find a questionnaire for inputs for the session "How do we see our own department". Please provide your feedback by April 24"
Limits of Machine Learning

Pekka Parviainen is an associate professor in machine learning at the University of Bergen. His research interests concentrate around probabilistic models in machine learning.

Abstract:

Machine learning has recently become a hot topic in both academia and society in general. While machine learning has been successfully applied in many problems, it has also lots of limitations.
In this talk, I will review some limitations and challenges of state-of-the-art machine learning both from theoretical and practical point of view.

Date: March 28, 2019
Time: 14:15 - 15:00
Large Auditorium 2nd floor
Datablokken.
Programs and proofs

Trial lecture in connection with recruitment for Tenure track Associate Professor position in software:

Håkon Gylterud
Friday 29.03.19 at 11.15
in room 510N3  5th floor.
Refreshments will be served.

Abstract:

Dependent type theory is a flavour of type theory, where programs and their proofs of correctness can be expressed in the same language. Dependent types also allow programs to work with more accurate representations of the objects they are trying to model, because many properties can be determined at compile-time. A crucial property of a good representation is that the operations we perform produce equivalent output when operating different representations of the same object. In this talk, we will see how homotopy type theory (a variation of dependent types based on ideas from topology) allows good representations of data structures with symmetries, such as cycles and bags.

Further more, we will see a model of set theory in this framework, which allows transferring results from more traditional semantics into dependent type theory.
Enhancing Human-Centered Machine Learning with Visual Analytics

Friday, 5th of April, from 10:15
Høyteknologisenteret, rom 30201
(Thormøhlens gate 55)

Jürgen Bernard
Post-doc @ Technical University
Darmstadt, Germany

Abstract:

Machine Learning is a key technology in the era of data-centered and data science applications. Effective Machine Learning models have been trained in the past, that ease our everyday life or gain other types of promising benefits. However, the human-centered perspective of the Machine Learning process is still less understood. Today, in many cases humans still do not fully understand how analytical models have been trained, why models predict a particular output for a given input instance, or whether predictions of these models always reflect humans’ notion of judgement in a meaningful way. In most cases, end users rely on the expertise of data scientists who need to act as a sort of mediator in the Machine Learning process. One can only hope that the information need and abilities of end users (domain knowledge, expertise, and individual preferences) are well reflected in existing data science solutions. This talk motivates the human-centered perspective of Machine Learning. The basic idea is to conflate the strengths of visualization, HCI, and algorithmic models to foster the human-centered Machine Learning process. Users will be able to play a more active role in the process and become an integral part of highly interactive and iterative training and validation cycles. I will demonstrate that visual analytics is a promising approach to address this endeavor. In two examples research directions, I will show how human-centered Machine Learning can be put into practice. The first example is the exploratory search in time-oriented data. I will demonstrate how the design and application of content-based exploration and search systems can be adopted to time-oriented data. The second example refers to “Visual-Interactive Labeling” (VIAL). I will demonstrate how the strengths of humans and algorithmic models can be conflated to foster the labeling of unknown data sets and to apply interactive machine learning.
Lunch panel debate 2nd April: “What to do with all of these PhDs”

Each year, there are more and more PhDs, but the number of senior positions in academia remains roughly constant. Many will have to leave academia.

- Who will employ all of these PhDs?
- What skills do PhDs need?
- Should the PhD education change?

The event will take place 2 April 2019: 12:00 - 13:15 at Store Auditorium, Høyteknologisenteret.

The debate will be held in English, and lunch will be provided for the first 50 participants!

The debate is organized by young scientists for young scientists, hosted by UiBdoc and the Young Academy of Norway.

Learn more.
Infomøte om IKT-studier

Tirsdag 2. april kl. 16.30 har vi i samarbeid med Infomedia og HVL invitert elever fra videregående skoler til infomøte om IKT-studier i Bergen her i Store auditioium, Datablokken. Hensikten er at de skal kunne bli bedre kjent med faget, møte noen av våre studenter og høre om jobbmuligheter.

<table>
<thead>
<tr>
<th>16:30</th>
<th>Velkommen</th>
<th>Registerer deg, så er du med i trekningen av en Ipad! Hvorfor bør du studere IKT? Vi gir deg mange gode grunner!</th>
</tr>
</thead>
<tbody>
<tr>
<td>17:45</td>
<td>Pause med matservering</td>
<td>Kom i prat med studentene og andre innleggholdere</td>
</tr>
<tr>
<td>18:15</td>
<td>Jobbmuligheter</td>
<td>Her arbeidsgivere i Bergen fortelle om dine jobbmuligheter. DNB, Bouvet og Vizt kommer.</td>
</tr>
<tr>
<td>19:00</td>
<td>Studiemiljø</td>
<td>Hvordan er det egentlig å være student? Hør studenter fortelle om sin studiehverdag</td>
</tr>
</tbody>
</table>

Her kan du lese mer om arrangementet.

Informatics – Optimization Supply Chain Online Competition, Norway 2019

Our own Ahmad Hemmati is organizing a nation-wide Business Simulation Game for all students in Norway! The game starts at 14:00 on Wednesday afternoon, April 3, 2019.

Please encourage all your students at all levels to participate!

This is a competition that lets you test your ability in managing a Supply Chain (SC) in a competitive virtual environment that mimics many aspects of the reality. The winners are those with the best profit at the end of the game.

Please find more information, game instructions and the registration link here.

The competition is free, but we have a limited capacity.
Prizes for first, second and third place = gift cards!

PhD Updates

PhD day at the Mathematical and Natural Science Faculty April 5

All informatics PhD students are encouraged to attend the PhD day at The Mathematical and Natural Science Faculty on April 5. Meet fellow PhD candidates and research support staff over coffee, lectures and discussions. We cover topics from surfing the publication tsunami to increasing your visibility.

Registration deadline April 1. There is a free lunch!
PhD students: Represent our department at the Young Researcher Grand Prix!

Forsker Grand Prix er Norges mesterskapet i forskningsformidling for PhD studenter.

Som deltager får du en fantastisk mulighet til å lære mer om hvordan du når fram med budskapet ditt til et stort publikum. Dessuten får du formidlingspoeng for å delta.

VI oppfordrer våre PhD-studenter til å melde seg på denne konkurransen, og vi lover god støtte dersom noen av dere tar sjansen.

Her finner du [mer informasjon og påmeldingslenke].

Fristen er 30. april.

Lecture 3 April “Career Development Strategies”

A lecture on how to implement career development in PhD-training in the future.

Career building skills are increasingly important for graduates of doctoral training programmes. In a diverse job market, candidates need counselling, guidance and good examples. Yet, whose responsibility is career guidance? What skills should we teach? And what are good methods of career guidance?

This lecture is aimed at YOU who is engaged in PhD-training and wants to provide good and efficient career guidance. The lecture is open to all, and supervisors, PhD-coordinators, graduate school managers are especially invited.

Read more here

Funding opportunities

Reminder: Peder Sather Grant Program

Information and application form.
Closing date: 1st April 2019.

Insentivmidler for kvalitetsarbeid i studiene og nominasjoner til Ugleprisen for 2019

DKNVS’ støtte til forskning og formidling
Det Kongelige Norske Videnskabers Selskab forvalter fond og legater som bl.a. benyttes til å støtte forskning og formidling. Hvert år lyses det ut midler til dette formålet. I år deler vi ut 275 000 kroner.

Formål det kan søkes støtte til i 2019:
• forskning på bærekraftig samfunnsutvikling
• vitenskapelige reiser og felter arbeid
• seminarer og konferanser

Målgruppe: Alle fagdisipliner. Midlene kan ikke brukes til støtte for masteroppgaver

Sum: Samlet utdeling i 2019 er 250 000 kroner, og beløpet kan fordeles på inntil fem mottakere.

Kilde til teksten øverst og søknadsinformasjon

Research Science and Seminars

Bergen AI & Machine Learning symposium, 25-26 March 2019

Our department, together with the Department of mathematics and Department of information and media sciences, is organizing a workshop to gather all AI and machine learning researchers in Bergen.

The meeting will be at Solstrand, and the organizing committee consists of Ketil Malde, Marija Slavkovik, and Hans J Skaug.

If you are interested to participate, please get in touch with the organizers. More details can be found here.

Den store formidlingsprisen 2019

Fakultetet ønsker å stimulere til økt formidling, og oppretter fra i år av en egen pris på 50 000 kroner som deles ut i forbindelse med bachelorseremonien i Universitetsaulaen i juni.

Kandidaten skal vurderes på bakgrunn av følgende kriterier:
«Formidlingsprisen skal inspirere til å ta formidlingsoppdraget alvorlig. Prisvinneren skal strekke seg langt for å bidra til å opplyse samfunnet, skape debatt, synliggjøre forskning og utdanning ved Det matematisk-naturvitenskapelige fakultetet, stimulere til formidling eller på annen måte være en viktig bidragsyter til kunnskapsspredning og samfunnsdebatt.»

Alle som studerer, arbeider eller forsker under Det matematisk-naturvitenskapelige fakultetet oppfordres til å sende inn nominasjoner her innen 15. mai 2019.

Vacant positions

Postdoctoral Research Fellow position in Bioinformatics
Closing date: 22.03.2019. Please find the announcement here

Senior engineer
Closing date: 01.04.2019. Please find the announcement here

PhD position in algorithms
Closing date: 01.04.2019. Please find the announcement here

Postdoctoral Research Fellow position within Molecular and Cancer Biology
Closing date: 17.04.2019. Please find the announcement here.
Election of members to groups B and D of the MN-Faculty- and Department Boards

The candidates will be elected for the term 01.08.2019 – 31.07.2020. Are you interested in running, or do you know someone who wants to be part of the MN-Faculty board, or the Informatics Department Board we would like to hear from you!

Deadline for proposals: **28th March 2019, 12:00 PM.** Election period: Voting will start 20th May at 09:00AM and ends 24th May at 12:00PM.

Please learn more here: [Election for the MN-Faculty Board](#) and [election for the Informatics Department Board](#)

New serviceteam for absence and parental leave at UiB!

Are you planning your parental leave? If so, you need to contact the Serviceteam who will help both you and your leader in this process. The Serviceteam will help everyone who will take parental leave, both mothers and fathers, by guiding them through their rights and the applications.

The serviceteam will also support the units on registration of absence and strengthen the refund-process towards Nav. Read more about the service [here](#) (Norwegian only, English version will come later).

New routine: Issue tracker for The Faculty`s finance department

The Faculty’s finance department has launched a customer service support system “Issue-tracker” to receive and answer questions and other inquiries from employees and students. The issues should be sent in to the group called ‘Økonomi MNFA’ where institutes are divided into sub-groups respectively. By choosing this way of sending inquiries rather than sending emails to individual people, employees and students are guaranteed that the requests are handled in a timely manner independent of holiday periods and absences.

Department Boat Trip and Summer Party – save the date 22nd August!

On the 22nd of August, in the afternoon, we are planning a summer party combined boat trip for all our employees together with all our new students of the fall semester of 2019!

Two boats will come and pick us up from Marineholmen, close to the department building. Food and refreshments will be served. There will be games and entertainment.

We encourage everybody to reserve the date in their calendars and plan to join this event!

Thanks to all that visited the photographer! Now please update your UiB webpage

In total 52 visited the photo sessions we organized for you. Very good, and thanks for showing up!

We now strongly encourage you to update your personal and official UiB webpage with a photo. This webpage will be the first hit when googling your name and the UiB, and the page also serves as part of the department employee web gallery/catalogue. We hope to see you all smiling there from now on!
Fire extinguishing course

All employees at our university are required to attend a fire extinguishing course at least once. There are several courses in May, and one in June which is held in English. [Information about the courses and sign up here.](#)

Please notice that they are offering one course in English only once per semester. This semester the course in English will be held on 23rd May.

Reminder: Informatics yoga on Wednesdays

Yoga is a great way to reduce stress and tensions from work. Yoga classes are held at our department on Wednesdays at 2:30 p.m. to 3:30 pm at the Meeting room in 5th floor.

Our professional yoga instructor, Kjersti Naess, is teaching in English. No signing up, and no participation fee. Please bring your own yoga mat. We also have some mats for loan.

Reminder: Kakeklubben on Mondays

Kakeklubben aims to help our international colleagues to practice Norwegian while spending nice time together with people across group borders. Club meetings are held on Mondays at 12 o'clock in the lunchroom, 4th floor.

You bring your own lunch, and we share a cake or fresh baked waffles. All are welcome!

We hope to see you there, both internationals and Norwegians!

Reminder: Waffle-Oracle every Thursday -- employees are very welcome!

Did you know that our students serve waffles every Thursday between 14.00 and 16.00? All faculty and other employees of the department and most welcome, too! Our students would like to see more employees at the waffle sessions!

New application period for the cottages at Ustaoset and Tingviken- spring 2019 & Easter

It is now opened to apply for U-heimen, Ottesheimen and Butten at Ustaoset and Tingviken at Utne for the spring period from 23 June until 18 August 2019.

Please use the [UoB electronic cabin system](#) by logging in with your registered username and password.

The application deadline is 4 April. Drawing will be done 8 April.
Welfare offer from the UiB: Folk og røvere i Kardemomme by

Festen fortsetter i Kardemomme by frem til påske!
Ta med små og store barn på denne varme og fine versjonen av Folk og røvere i Kardemomme by!

Lørdag 6. april kl. 16.30 på Store Scene. UiB pris kun 100,-

Bestill her eller ring 55 60 70 80 innen 22.mars!
Mer informasjon.