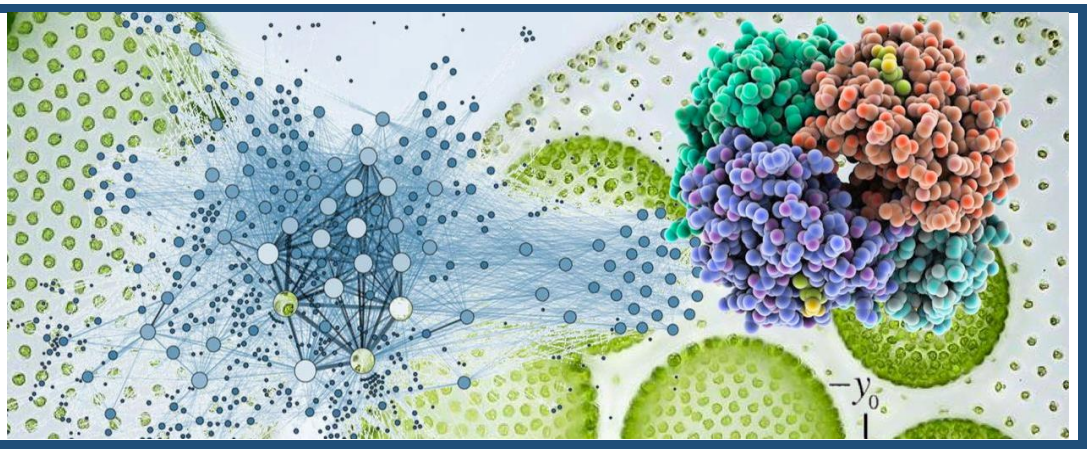
NEWSLETTER

Department of Informatics

No. 04/2018, 15th June



Editor-in-chief: Pinar Heggernes. Editor: Linda Vagtskjold. Contributions or comments to the newsletter are very welcome.

Dear colleagues,

The spring semester of 2018 is coming to an end. On Wednesday I had the pleasure of attending the graduation ceremony of our master graduates of this semester. What a wonderful bunch of bright young people! We can be proud that we are graduating highly skilled, properly trained IT specialists with a technological education based on a rock solid theoretical fundament. Next semester we will be welcoming 51 more bachelor students and 14 more master students than last year! Those 51 form our portion of the 75 assigned to our university, out of the 500 additional IT study slots at bachelor level, which were allocated nationwide by the government. We can expect a similar increase in the coming years. The government has announced that they will increase the number of IT bachelor study slots by 500 each of the coming 3-4 years. In addition, they will ask for every technological education to contain a component of information security.

With the steadily increasing number of study slots nationwide, it is not only to our advantage but also our duty to make sure that as many of those study slots are assigned to the University of Bergen, and in particular to the Department of Informatics. Norway needs IT specialist who are not only skilled programmers, but also have solid mathematical and algorithmic background, are able understand complicated systems and dive into problem specifications from a wide variety of application areas. Receiving additional study slots over a period will give us the opportunity to expand, and as you know, we are already in the process of recruiting in several areas. However, recruiting a steadily increasing number of qualified students and recruiting excellent colleagues will most probably pose some challenges. The quality of our education is confirmed by the fact that companies are extremely happy with our graduates, and the word is spreading. We must work on spreading the word ourselves as well, keeping a strong focus on recruitment at all levels in the coming years.

I am truly excited about welcoming our new students next semester, as well as welcoming back our current students after the summer holidays. In addition to our focus on recruiting, we will intensify our efforts to make sure that a larger percentage of our students actually graduate. Our hope is that the increase in the required level of mathematics from high school will be of good help in that direction.

I wish you all a very nice summer!

-Pinar

Actualities [The Dean's blog](#) - [På Høyden](#) - [Khrono](#) - [Gemini](#)

Picture report from the graduation ceremony

Do you want the entrance area of Datablokken to be filled with pictures of fish?

If not, please pay attention to this copy-paste from the last newsletter:

The UiB Estate and Facilities Management Division (Eiendomsavdelingen) are currently planning a facelift/upgrading of the entrance area for Datablokken. Among other measures, they are planning to decorate one wall with ICT related pictures, like the ones in the main entrance area for the HIB-building (mostly marine biology pictures). Picture contributions from us are most welcome. Please send your suggestions for ICT related pictures to [Ingrid Kyllingmark](#).

Picture report from the Garden Party at Petter’s

Automatic control of travel expenses claims – Bot-Anna ☺

On the 13th June 2018, the Payroll Section will start a pilot project involving automatic controls of travel expenses claims at the Faculty of Mathematics and Natural Sciences. The virtual assistant Bot-Anna will perform the controls.

The pilot project consists of three phases:

1. The attestant for variable pay (VLA) checks that Bot-Anna makes the right choices.
2. The travel expenses claim is automatically returned to the sender if Bot-Anna finds any errors.
3. Bot-Anna returns the travel expenses claim if an error is detected or forward for approval if everything is OK.

Bot-Anna uses the comments section to register the results of the controls. If you find that Bot-Anna has made a mistake, you can comment on this in the same comments section and forward this in the system.

Guidelines for completing travel expenses claims

Please follow these guidelines for a faster and more efficient process.

- Enter each expense item on a separate line, and upload the receipt for this expense on the same line. You can no longer scan several receipts in one file. When you complete the travel expense form, it will be clear what type of expenses require a receipt.
- The amount you enter must be identical with the amount on the receipt - including the exact decimals! This also applies to foreign currency.
- Make sure that the dates you enter are within the journey's start and end dates. On pre-purchased tickets, type the travel date, not the date of purchase.
- Please attach a file stating where the travel costs should be charged (institute/department, project, analysis / activity), approved by the project manager or leader/BDM.

If you have any questions, please contact your VLA, Tor Bastiansen.

Academic affairs and PhD Updates

PhD defence, Bo Sun

MSc. Bo Sun will defend her thesis "*On Classification and Some Properties of APN Functions*" on June 22nd at 15:15, VilVite. All are welcome!

- Opponent: Associate Professor, PhD Natalia Tokareva, Sobolev Institute of Mathematics/Novosibirsk State University, Russia
- Opponent: Senior Executive Officer, PhD Lars Eirik Danielsen, Miles Bergen AS, Norge
- Committee member: Researcher, PhD Marco Calderini, Department of Informatics, University of Bergen
- Custos: Professor Emeritus Tor Helleseth, University of Bergen

Please find the press release here.

PhD defence, Eivind Jahren

MSc. Eivind Jahren will defend his thesis *"Three exact methods for some problems in Combinatorial Optimization*" on June 29th at (to be decided), Large Auditorium, Datablokken, HIB. All are welcome!

- Opponent: Associate Professor, PhD Filip Maric, Faculty of Mathematics, University of Belgrade, Serbia
- Opponent: Associate Professor, PhD Albert Oliveras Llunell, Department of Computer Science, Technical University of Catalonia, Spania
- Committee member: Professor, Dr.rer.nat. Jan-Joachim Rückmann, Department of Informatics, UiB
- Custos: to be decided

Please find the press release here.

Master's graduates, spring semester 2018

Candidate	Title	Main Supervisor
John Petter Indrøy	*Algebraic Attack on Small Scale Variants of AES using Compressed Right Hand Sides*	Håvard Raddum
Espen Johnsen	*Reliable Asynchronous Communication in Distributed Systems*	Kjell Jørgen Hole
Øystein Kjørsvik	*DECLOUD: AN UNSUPERVISED DECONVOLUTION TOOL FOR BUILDING GENE EXPRESSION PROFILES*	Inge Jonassen
Jonas Berdal	*A Novel Approach to Assessing Source Code Quality*	Anya Bagge
Jostein Bergheim	*Strukturering av data for internettbehandling av pasienter med depresjon*	Carsten Helgesen
Tarjei Broch	*Evaluation of Property Models for Programming Web GUI's*	Jaakko Järvi
Isabel Thevahi Francis	*Efficient implementation of LowMC in Helib*	Håvard Raddum
Marius Emil Giske	*Interactive Hybrid Ray Tracing in Unity*	Daniel Patel
Yngve Sekse Kristiansen	*A Visual Language for Nested Visualization Design*	Helwig Hauser
Didrik Anderssen Kvanvik	*Implementing a modern Web GIS using React with focus on functionality*	Torill Hamre
Fengming Miao	*Discriminating between surfaces of peripheral membrane proteins and reference proteins using machine learning algorithms*	Nathalie Reuter
Roar Mjelde	*Self-referral to specialist healthcare through web-based decision support*	Yngve Lamo
André Mossige	*Developing data catalogue extensions for metadata harvesting in GIS*	Torill Hamre
Sindre Lilland Nerdal	*Newsenhancer*	Atle Geitung
Roy Bakke Nesbø	*Robotics modeling with PapyrusRT*	Rogardt Heldal
Sturle Nordeide	*Smartfjell: Hvordan gjøre fjell smarte med sensorer?*	Rogardt Heldal
Håvard Homme Pettersen	*Design and Development of Game-based Oculomotor Training using Eye Tracking*	Carsten Helgesen
Adrian Reithaug	*Employing Deep Learning for Fish Recognition*	Atle Geitung
Ole Eskild Steensen	*A novel collaboration platform: Structuring books as networks*	Rogardt Heldal
Runar Tistel	*Projecting Art into Virtual Reality*	Harald Soleim
Lars Olav Tolo	*Multi-GPU Rendering with Vulkan API*	Daniel Patel
Andreas Svardal Vikne	*Cross-Site Scripting Protection in Firefox*	Pål Ellingsen
Thomas Wingsternes	*Improved Combinatorial Bounds and Enumerators for the Connected Vertex Cover and Independent Feedback Vertex Set Problems*	Daniel Lokshtanov
Håkon Tjeldnes	*An Atlas of the Human uORFome and its Regulation across Tissues*	Eivind Valen
Hussam Samir Yousif	*CFlat : An Intermediate Representation Language for the Purpose of Software Migration to Java and C#.*	Daniel Lokshtanov

Research, Science, and Seminars

Norwegian Informatics Conference (NIK) 2018

Call for Participation, Norwegian Informatics Conference (NIK) 2018, 18. – 20. September 2018, Svalbard
nikt2018.ifi.uio.no

The first Norwegian Informatics Conference (NIK) was organized in 1988. To celebrate the 30th anniversary, University of Oslo has the pleasure of organizing NIK 2018 from 18-20. September 2018 in Svalbard, as part of the Norwegian Conference for ICT Research and Education (NIKT).

NIK is a broad national conference aimed at being an important national venue for discussions, networking, and dissemination of research and advanced development work in informatics and computer science. Topics of interests cover all areas of informatics, theoretical and applied computer science. NIK accommodates interdisciplinary work and diversity in scientific approaches and application areas.

Important Dates
Deadline for registration and camera-ready: 13 June 2018
Conference at Radisson Blu Polar Hotel Spitsbergen: 18 - 20 September 2018

More information about the preliminary program overview
Registration for the conference: http://nikt2018.ifi.uio.no/registration_en.html
Booking of hotels

Vacant positions

PhD position in Computational Biology

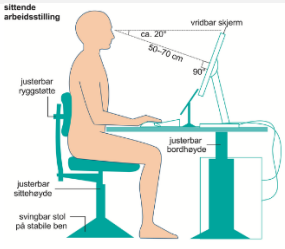
Closing date: 05.08.2018. Please find the announcement here.

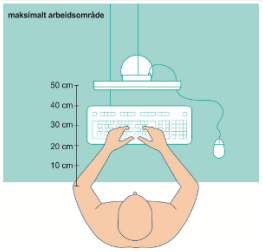
HR, Operations, Health, Safety and Welfare sikresiden.no – UiB welfare offers

Ergonomic assessment day 27 August

UiB's physiotherapist has re-scheduled our appointment, and will visit us on Monday 27 August at 12:00-15:00. Her mission is to help us with ergonomic assessment of our new employees' office workplaces.

If you are not among the new employees since January 2018, but still want us to visit you for an ergonomic assessment of your office workplace – please sign up by sending an email to Linda Vagtskjold.





Credit Card UiB

Permanent and temporary employees at UiB may apply for the credit card Eurocard. This is a corporate credit card to be registered in the name of the employee. The card is to be used for work-related travel expenses. The card cannot be used for payment of private expenses. Invoices will be sent to and must be paid by the cardholder. UiB's previous agreement with Diners is no longer valid.

By using the card you may be insured. Please therefore register the card number in your profile at Berg-Hansen. If you register the credit card in the HR-portal, your credit card transactions may be found for direct transfer to your travel expense account. More information

Cheap cinema tickets

UiB employees can buy two cinema(lenke til bergenkino.no) tickets for 70 NOK per ticket, once a month. In addition, we can buy as many cinema tickets as we want for 90 NOK per ticket. Normal ticket prices are 120 - 140 NOK. More details

Gym facilities at student prices

UiB employees can subscribe to the Sammen training studios at the same prices as the students. Sammen has several modern gyms in an around Bergen, some of which contain swimming pools or climbing walls. More details

New application period for the cottages at Ustaoset and Tingviken - autumn 2018

It is now opened to apply for U-heimen, Ottesheimen and Butten at Ustaoset and Tingviken at Utne for the autumn period from 19 August until 14 October 2018.

Please use the UoB electronic cabin system by logging in with your registered username and password. Upon initial application you must enter some information. All applications must be registered in the electronic cabin system to be included in the draw.

The application deadline is 18 June. Drawing will be done 19 June 2018.