Dear colleagues,

Between September 18 and 29, Forskningsdagene (Research days) are being organized all over Norway. The goal of this event is to create enthusiasm and understanding for research in general public, explain how research results impact our lives, increase the interest for research among school pupils, and attract young research talents to universities. This year, we have many volunteers from our department who are playing a central role in the Bergen event. Our PhD student Torstein Strømme is one of the 10 finalists in Researcher Grand Prix, which is a very popular competition in research communication. At Forskningstorget our department is represented with two stations: one by the Algorithms group (Cops and robbers - who will win?) and one by CBU (Molecules of life). Finally at Research Days for the Young, we have two of our young professors presenting their research for school pupils: Ahmad Hemmati and Eivind Valen. I am very proud of all of you participating in these events, and also grateful for the work that you are putting into outreach activities. I think being represented at such events might be a very fruitful way of attracting future students to our study programs.

Many others are involved in reaching out to school pupils in other ways, like the Norwegian Informatics Olympics, and several of you have approached me with ideas on how to introduce more programming to high school pupils. We are discovering that even pupils who take IT1 and IT2 at high school are not really exposed to “proper” programming and algorithmic thinking. Your ideas are very welcome in this direction, and perhaps we should direct our efforts to the closest and largest high school, Amalie Skram. Establishing contact with pupils already at their first year of high school, getting them excited about programming, and motivating them to take R1 and R2 mathematics, is something we want to do on a more regular basis and in a more formalized way in the future.

Our students are the foundation of our existence; we want more students to apply to our study programs, and we want more of our admitted students to graduate successfully. When I talk to each and every one of my colleagues, I am impressed by their commitment to educate our students in the best possible way. You give them real challenges to think about, ethical dilemmas, and examples from work life, in addition to teaching them the theory and the practice of every course. You really care, and that makes a difference! Thank you. I am very optimistic about the future, and confident that we will attract more and more students to our programs, and graduate larger and larger percentage of our admitted students in the years to come.

-Pinar

The Dean’s Blog – Helge K. Dahle

The Dean’s blog aims to inform us of ongoing work and processes at the Faculty of Mathematics and Natural Sciences.

His latest postings: Når det stygge egentlig peker mot noe vakkert i framtiden - At våre studenter er med til Nordpolen bekrefter at vi gjør mye riktig - Derfor er det viktig at du bidrar til endring
Welcome new colleagues!

**Benjamin Bergougnoux**

Benjamin is a new post doc in the Algorithms group, financed by the National Security Authority. The position is part of a large national project, which has a focus on computationally hard problems that can build the foundation for next generation asymmetric crypto algorithms. For next generation secure algorithms it is crucial that classical complexity analysis is taken into consideration.

This is how he presents himself:

Hi, my name is Benjamin Bergougnoux and I am a new post doc here. I did my PhD thesis in Clermont-Ferrand (in the middle of France), my supervisor was Mamadou Kanté. My thesis was about the algorithmic applications of width measures (tree-width, rank-width, ...).

Master thesis in Montpellier, PhD in Clermont-Ferrand, a short mission in Paris, now Bergen... I am dangerously moving northwards!

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**Sophie Fischer**

Sophie started this week in her new PhD position. Susanna Röblitz is her main supervisor.

The aim of the project she will be working on is to construct a mechanistic model for the regulation of sodium and water balance using data from variations in dietary sodium intake in both healthy and immuno-deficient mice. This also implies a close collaboration with experimental researchers at the University Hospital in Bonn/Germany.

Sophie is German. She did her Master’s in Biophysics at the Humboldt-Universität in Berlin in 2019. Master thesis title: “Competitive follicular growth in human: A mathematical modelling approach”.

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Actualities

**På Høyden - Khrono – News from NFR – News from UiB – Informatics on Facebook**

**Forskningsdagene (Research days) in Bergen 2019**

Cheque out Torstein’s Forsker Grand Prix presentation:

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Torstein Strømme

Institutt for Informatikk, Universitetet i Bergen

Kan algoritme redde planene dine fra å gå i våken?

Folk legger planer hele tiden. Noen planlegger å komme i god form til sommeren, andre legger planer for å få høy pensjonsutbetalinger når de blir eldre. Men til tross for både rasjonelle planer og unndrede omstendigheter, følges ikke planene alltid opp. Slik inkonsistens oppførsel over tid er et velkjent fenomen innen økonomi, hvor det forklares med at vi mennesker har en bias mot nåtidens jo nærmere en heklelse befinner seg, jo større fremstår verden eller kostnaden ved hensikten.

I en matematisk modell hvor agentene har slik nærhetssvaghet, har man innsett at det ofte behøves ekstra spilletteregler for å motivasjon dem til å nå sine mål enn om agentene hadde vært fullt ut rasjonelle. Slike ekstra spilletteregler kan være alt fra å innføre kunstige tidstiltak til åøre en gate enkelt. Torstein sitt arbeid handler om hvorvidt datamaskiner kan brukes til å regne ut et slikt med spilletteregler som godt motiverer agentene til å nå sine mål.

... and the other candidate’s presentations .

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The event takes place on 25th September in “Mimes Brønn” at Høgskolen på Vestlandet, Campus Kronstad. More detailed information and buy tickets here. We hope that as many as possible will be there cheering for Torstein!
PhD Updates

PhD trial lecture and defense - Marika Ivanova

Marika Ivanova will defend her thesis "Optimization Problems in Communication Networks and Multi-Agent Path Finding" on Friday 13 September at 10:15, Large Auditorium, Datablokken. All are welcome!

- Opponent: Professor, PhD André Rossi, University of Paris Dauphine, France
- Opponent: Associate Professor, PhD Noa Agmon, Bar Ilan University, Israel
- Committee member: Associate Professor, Dr.rer.nat. Uwe Wolter, UiB
- Leader of the defense: Professor Helwig Hauser, Dept. of Informatics, UiB

Please find the press release here

The trial lecture “Optimization models for clustering problems in machine learning” will take place on Wednesday 11 September at 09.15, group room 209N1, Datablokken.

NORBIS conference!

Welcome to the 5th annual conference of NORBIS

September 30 - October 2, 2019
Oscarsborg fortress, Drobak

Join us there for inspiring lectures, student talks, poster sessions, team-building activities, networking and more!
Read more and register here: norbis.no/activities/conference
Deadline: August 26th
Travel and accommodation covered for students, post-docs may apply.
Limited number of places available.
CEDAS seminar September 11, 14:15-15:00; Dept. Mathematics
This Mathematics department colloquium is also relevant for CEDAS, and hence also has status as a CEDAS seminar.

**UNIVERSITETET I BERGEN**
Matematisk institutt
Seminarrrom Delta 4A9f, Realfagbygget
Allégaten 41

**Fellesseminar**

Tid: onsdag 11. september 2019 kl. 14.15

Xiaodong Luo, seniorforsker, NORCE

**TEMA:**

Ensemble-based kernel learning for a class of data assimilation problems with imperfect forward simulators.

**Sammendrag:**

Simulator imperfection, often known as model error, is ubiquitous in geophysical data assimilation problems. Despite the enormous efforts dedicated to addressing this problem, properly handling simulator imperfection in data assimilation remains to be a challenging task.

In this talk, we introduce an approach to dealing with simulator imperfection from a point of view of functional approximation that can be implemented through a certain machine learning method, such as kernel-based learning adopted in our work. To this end, we start from considering a class of supervised learning problems, and then identify similarities between supervised learning and variational data assimilation. These similarities found the basis for us to develop an ensemble-based learning framework to tackle supervised learning problems, while achieving various advantages of ensemble-based methods over the conventional variational ones. After establishing the ensemble-based learning framework, we proceed to integrate ensemble-based learning into an ensemble-based data assimilation framework to handle simulator imperfection.

For demonstration, we apply the ensemble-based learning framework and the integrated, ensemble-based data assimilation framework to two synthetic problems and a real field case study. The experiment results indicate that both frameworks achieve good performance in relevant case studies, and that functional approximation through machine learning may serve as a viable way to account for simulator imperfection in data assimilation problems.
Invitation to the offshore wind conference Science Meets Industry Bergen 12 September 2019

Science Meets Industry Bergen
- a meeting place for the offshore wind industry

September 12, 2019 at The university aula, UiB, Muséplass 3, Bergen

Norconcept in cooperation with BOW and GCE Ocean Technology

Bergen Offshore Wind Centre (BOW) in collaboration with NORCOWE and GCE Ocean Technology have the pleasure of inviting you to the offshore wind conference Science Meets Industry in the University Hall in Bergen on 12 September 2019. The purpose of the SMI Bergen 2019 is knowledge exchange between academia, industry and public sector on offshore wind. The conference is free and open to all, but registration is required. We expect the conference to fill up, so register early to secure your place. Register here!

Invitation: THE OCEAN, Bergen, September 17th, 2019

THE OCEAN is a new arena for sustainable, value-added and competitive solutions and partnerships across the ocean industries and academic institutions. THE OCEAN will be a yearly event, and we invite you to the first event in Bergen, September 17th, 2019.

To reach the vision of a sustainable utilization of ocean resources, we must stimulate increased knowledge, innovation and technology development. THE OCEAN is initiated by a broad range of partners aiming to provide the most important and relevant event for new discoveries, connections and collaborations across ocean industries.

Keynote speakers at THE OCEAN:
- Erna Solberg, Prime Minister
- Elisabeth Grieg, CEO, Grieg International
- Ole Eirik Lerøy, Chairman of the Board, MOWI
- Beate Myking, Senior Vice President, New Energy Solutions, Equinor

Arne Hjeltnes will be hosting the keynote speakers and invited guests for THE OCEAN Talkshow.

You will also meet industry and academic leaders talking about sustainability, innovation and crossover in the ocean industries, blue sustainable finance, governmental regulations and priorities and research for sustainable utilization of ocean resources.

Programme and registration at www.theocean.no
Keynotes (to be completed)

— Jie Tang (Tsinghua University) Graph Embedding and Reasoning

Courses (to be completed)

— Jiawei Han (University of Illinois, Urbana-Champaign) [advanced] From Unstructured Text to TextCube: Automated Construction and Multidimensional Exploration
— Wladimir Minor (University of Virginia) [introductory/advanced] Big Data in Biomedical Sciences
— Pieter Rousseauw (KU Leuven) [introductory] Anomaly Detection by Robust Methods
— Hanan Samet (University of Maryland) [intermediate] Multidimensional, Spatial, and Metric Data Structures for Sorting in Space and Similarity Searching
— Rory Smith (Monash University) [introductory/intermediate] Learning from Data, the Bayesian Way
— Jeffrey Ullman (Stanford University) [introductory] Big-data Algorithms That Aren’t Machine Learning

Funding opportunities

On a monthly basis, the department releases a comprehensive overview over upcoming funding opportunities on its website for research support services. Please inform research coordinator Stefanie Meyer about all planned and ongoing funding applications!

At this point, we would like to highlight the following upcoming calls and funding-related events:
## Local funding

**UiB sabbatical & travel support**

The researchers’ deadline to apply to the department for a sabbatical and related travel support funds (if relevant) is **1 October**. You can find more information by following this link (information is available only in Norwegian).

## National funding

### Research Council of Norway: FORSTERK

Supplementary Funding for **Norwegian Participants in Horizon 2020 Projects**; Between NOK 500 000 and NOK 1 000 000 can be awarded to Norwegian actors that have a central role in an ongoing H2020 project. ERC projects can also apply. The funding can be used for different networking and outreach activities. It is important that the funding is used for independent activities which build on the results of the Horizon 2020 project, and does not serve as double financing for activities under the project. **RCN application deadline: 25 September 2019**

### Research Council of Norway: Aurora and DAAD Mobility Programmes – Researcher Exchange for New Collaboration between Norway and France/Germany

The AURORA and DAAD mobility programs facilitate the collaboration between Norwegian educational and research institutions and corresponding institutions in France and Germany, respectively. Researchers from Norway who want to develop new joint research projects can apply for short-term visits in those two countries. The main aim of the programs is to strengthen European research collaboration under EU’s next framework program Horizon Europe. **RCN application deadline: 25 September 2019**

### UH-nett Vest: Research funds

The University and College Network for Western Norway (UH-nett Vest) is a collaborative network between the University of Bergen, the University of Stavanger, the Western Norway University of Applied Sciences, Volda University College and the University of Agder. The network has now opened a call for funds that shall strengthen the research collaboration among its partners. For more information, please follow this link. **Application deadline: 15 October 2019**

## International funding

### Fulbright stipends for students and researchers

The Fulbright Program annually allocates funds to: (i) Norwegian researchers from all research fields; the funds are meant to help researchers teach or conduct research in the US. (ii) Norwegian students; the funds are meant to help students conduct all or part of their master or PhD studies in the US. **Application deadline: 1 October 2019**

### NordForsk: Nordic Programme for Interdisciplinary Research

“The aim of the Programme for Interdisciplinary Research is to promote high-quality bottom-up research that combines and integrate skills from multiple disciplines. Key assessment criteria under the programme will be excellence, interdisciplinarity, and Nordic added value. The programme is specifically aimed towards genuinely interdisciplinary projects that combine disciplines which are far removed from one another and rarely collaborate, or that pursue an original research question requiring the exact combination of competencies from different disciplines proposed in the application. **Projects awarded funding under the programme are required to encompass research within at least two of the three areas of science as used by the European Research Council: Life science; Physical Sciences & Engineering; Social Sciences and Humanities.**” **Application deadline: 13 November 2019**

### Horizon 2020: FET Proactive: emerging paradigms and communities

“Proposals are sought for cutting-edge high-risk / high-reward research and innovation projects that aim to demonstrate a new technological paradigm within the scope of [several] sub-topics, [including] a. Future technologies for social experience. This sub-topic explores new technologies for interaction that are based on new kinds of immersion for virtualised or augmented social interaction and that will lay the basis for the social media in 10-20 years from now. […] c. Digital twins for the life-sciences. The sub-topic aims at the close integration and real-time interaction of dynamical models of biological structures (from biochemical pathways to cells, tissues, organs and individuals), with imaging and sensing technologies for biological mechanisms and processes.” **Application deadline: 22 April 2020**
Vacant positions

Tenure Track Associate Professor in Machine Learning
Closing date: 15th September. Please find the announcement here.

HR, Health, Safety and Welfare sikresiden.no – UiB employees welfare benefits - Credit card UiB - Fire extinguishing courses

We belong to the 4th floor kitchen!!

Please bring back these cups to the kitchen in 4th floor.

These cups were bought of environmental reasons to avoid using disposable cups for meetings and events.

Reminder: deadline for applying for Sabbatical for next year: October 1st
Please find more information here. For any questions, please contact Stefanie Meyer.

Ergonomic assessment of office workplace September 23rd
UiB’s physiotherapist will visit us on Monday 23 September at 12:30-15:00. Her mission is to help us with ergonomic assessment of our new employees’ office workplaces.

If you are not among the new employees since February 2019, 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.

Basic first aid course

There are still available seats at the first aid course for foreign employees Thursday 19th of September 2019, from kl. 0830 – 1130.

The course is in English for foreign employees at UiB. For more information about the course and registration, please follow this link

Fire Safety course
All employees at the UiB are required to complete a fire safety course. The course lasts two hours – 1 hour of theory and 1 hour of practice. If you have not attended a course previously, you are required to do so as soon as possible. Please notice that this fall there will be one course in English intended for non-Norwegian speaking staff: Thursday December 5th - 09:00-11:00. Follow this link to sign up. For «Fakturadresse» use this code: 121200

Frokokseminar 25.september - Det gode arbeidsmiljø

Det gode arbeidsmiljø

Arbeidsliv i endring – hva med arbeidsmiljøet?

Frokokseminar 25.september

Ledelse – medarbeider - endring


Arrangement

0830 Velkommen, universitets hovedverneombud ved Lee Maw and Michael P. Røsset, vara UHVO UiB

Program

0845 Helthet og arbeidsgiverpolitikk ved Sonja Dyrvoll, HR direktør UiB
0900 Gir tydelig og felles praksis oss bedre arbeidsmiljø? ved Elisabeth Müller Lysebo, fakultetsdirektør Det matematisk-naturvitenskapelige fakultet
0915 God onbord og erfaringer med helhettig arbeidsgiverpolitikk ved Heidi Anette Espedal, fakultetsdirektør Det medisinske fakultet
0930 Dialog og diskusjon, innspill til senere frokokseminar

Påmelding innen mandag 23. september på denne lenken her

https://skimaker.app.uib.no/view.php?id=827493

Velkommen!
Welfare offer for UiB employees:

SKIPET DE ZEE PLOEG
Det er kun få forestillinger igjen av det historiske dramaet om Skipet de Zee Ploeg på DNS. Lørdag 28.september er siste spilledato og da er det reservert billetter til UiB velferd. I tillegg får UiB-ansatte rabattierte billetter til fredag 27.september.

Lørdag 28. september, Store Scene kl 18.00.
Billettpris: kun kr 240,- (ord.pris 450).
Bestillingsfrist: 12.september
Kjøp billetter via denne lenken

Fredag 27. september, Store Scene kl 20.00.
Billettpris: kun kr 240,- (ord.pris 450).
Bestillingsfrist: 27.september.

Kjøp billetter på dns.no og bruk rabattkode. Rabattkoden legges inn ved betaling (i handlekurven).

Rabattkode: SKIPETUIB (klikk på ->aktiver)

REGN
En fortelling om livet og søskenkjærlighet når ulykken inntreffer.

Drama: Kom og opplev den varme oppvekstskildringen fra 50-tallets Bergen.
En vakker fortelling om kjærligheten mellom to brødre, om sorg, vennskap og trøst når ulykken inntreffer. Regn er en gjenkjennelig og stemningsfull forestilling om det å vokse opp.
Basert på Stig Holmås sin roman Regn.

UIB-pris kun 240,- (ord 390,-)
Torsdag 3.oktober kl 19.30. Teaterkjelleren
Klikk her for å bestille billetter til spesialprisen (ctrl+klikk) eller ring oss 55 60 70 80 senest innen 20.september!

Klikk her for å lese mer om Regn og de medvirkende

WENDY & PETER PAN

Et magisk eventyr med spenning, humor og stjernestøv.

Familieforestilling: La barna bli med i eventyret når Wendy og hennes yngre brødre flyr over nattehimmelen sammen med Peter Pan! De møter blodtørstige pirater, frodige feer, en glupsk krokodille og skumle Kaptein Krok!
Alder: fra 6 år

UIB-pris kun 150,- (ord 220/290,-)
Lørdag 19.oktober kl 16.30. Store Scene
Klikk her for å bestille billetter til 19.oktober
Klikk her for å lese mer om Wendy & Peter Pan og de medvirkende

Fredag 25.oktober kl 16.30. Store Scene
Klikk her for å bestille billetter til 25.oktober eller ring oss 55 60 70 80 innen 5.oktober
Alder: fra 6 år
Å BERGEN BERGEN

En musikalsk hyllest til byen og alle de som befinner seg mellom de syv fjell.

Musikkeater: En festforestilling med nye hits og gamle slagere, hvor frodige karakterer og gjenkjennelige episoder bindes sammen på finurlig vis og gir oss skråblikk på byen vi bor i. Kom og møt buekorpsgutten, brannsupporteren, hip hop-dronningen m.fl i en helt ny teaterkonsert, med og for bergensere i alle fasonger.

UIB-pris kun 290,-(ord 480,-)
Fredag 15.november kl 20.00. Store Scene
Klikk her for å bestille billetter til 15.november eller ring oss 55 60 70 80 innen 1.november.

Klikk her for å lese mer om Å Bergen Bergen og de medvirkende

PEER GYNT DUB

Peer Gynt DUB – en tankevekkende bearbeidelse av Ibsens mesterverk signert den prisbelønte Tore Vagn Lid.

Gjennom en miks av skuespill, hørespill og konsert aktualiseres tema i «Peer Gynt» som går rett til kjernen i menneskesinnet og samfunnsstrukturer.

Det blir en tankevekkende, musikalsk og visuell teateropplevelse som i tillegg til å følge Peer Gynts livsreise, løfter frem nye sider ved det verdensberømte verket og rører ved spørsmål som treffer rett inn vi våre liv og vår samtid.

UIB-pris kun 240,-(ord 390,-)
Torsdag 28.november kl 19.30. Teaterkjelleren
Klikk her for å bestille billetter til 28.november eller ring oss 55 60 70 80 innen 15.november!

Klikk her for å lese mer om Peer Gynt og de medvirkende

New application period for the cottages at Ustaoset and Tingviken - late autumn 2019

It is now opened to apply for U-heimen, Ottesheimen and Butten at Ustaoset and Tingviken at Utne for the late autumn period from 13th October until 5th January.

Please use the UoB electronic cabin system by logging in with your registered username and password.

The application deadline is 13 September. Drawing will be done 16 September.
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 Næss, is teaching in English. No signing up, and no participation fee. Please bring your own yoga mat. We also have some mats for loan. All employees are welcome – also those of you who never tried yoga before.

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!