The background of the cover is a blurred, abstract image with warm, golden-brown and light blue tones. A prominent, curved, glowing line sweeps across the lower half of the image, creating a sense of motion and depth.

# Simula

## Annual Report

### 2013

Editor-in-chief    Professor Aslak Tveito, Managing Director

Editor              Karoline F. Hagane

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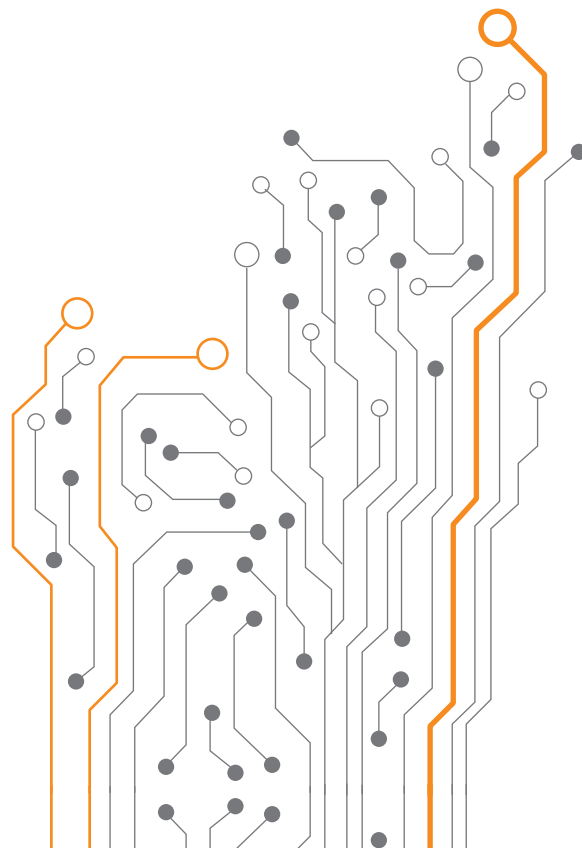
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# Simula

## Annual Report

### 2013

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Professor Aslak Tveito  
Managing Director Simula

## Centre for Resilient Networks and Applications (CRNA)

*In the many-faceted world of research, we often try to categorise the different activities along an axis of time. Placement of a research project along this axis can be determined upon considering the answer to the following question: How long does it take the research results to find their application in society? These questions have prompted a range of notions, such as “basic research”, “applied research”, “blue sky research” and “industrial research”.*

Simula has formulated the ideal that we shall do basic research that is motivated by an application. By this we mean that application of our research may lie in a somewhat distant future, but that our research should be a response to a tangible societal or industrial need.

One good example of Simula’s response to societal and industrial needs is the Centre for Resilient Networks and Applications (CRNA). Since

2006, the Norwegian Ministry of Transport and Communication has funded a large research project at Simula that works on the robustness of telecommunication networks. In 2013, we were informed that this research project was turned into a permanent centre, with a well-defined mandate. This mandate included responsibilities for maintaining a research infrastructure measuring the state of the Norwegian telecommunications infrastructure, doing basic and long-term research

based on the data sets obtained from it, and publishing annual reports on the measured robustness of Norwegian telecommunications.

Throughout 2013, we have worked to form CRNA into a strong research unit, adding multiple areas of expertise into the Centre. Through a newly formed strategic alliance with the University of Bergen, we are co-funding a research group there that works on computer security. This adds to the expertise

already at Simula on robustness. We have also added two Simula research groups to the centre. This gives the centre expertise in networked media applications, as well as expertise on the resilience of large computer installations that you typically find in cloud facilities. Finally, through an initiative called ConSeRNS, the University of Oslo are increasing their capacity and building competence within the field of computer security. They have decided to make this initiative a part of CRNA. Our centre therefore contains activities at two Norwegian universities, in addition to the main activity at our premises at Fornebu.

The Centre for Resilient Networks and Applications conducts basic research

that is motivated by real threats. Some of these threats are accidents, and some are threats originating in malicious intent. Regardless of intent, these threats can affect applications, devices, the telecom infrastructure or the cloud infrastructures that run these applications. These problems will be with us for a long time, and investment in basic and long-term research on these topics is therefore vitally important.

The threats are also very much contemporary. We have seen discussions on telecommunications infrastructures that did not work when a major fire hit a small community in Lærdal in early 2014. We have seen leaks from trusted personnel in national security agen-

cies, which indicates that the privacy of networked applications might have been violated. We have seen discussions on the implications of using Chinese equipment in our telecommunications infrastructure. The centre shall have annual dialogue meetings with the Ministry of Transport and Communication as well as the Norwegian Post and Telecommunications Authority, and it is building and expanding its collaboration with the Norwegian telecommunication providers. The importance of the CRNA is therefore not limited to future industrial result application. The centre combines basic and long-term research with immediate and present day relevance.



Professor Aslak Tveito  
Managing Director Simula



Professor Olav Lysne  
Head of CRNA



Professor Olav Lysne  
Head of CRNA



## The Board of Simula



**From left:** Joakim Sundnes (Deputy Member), Magne Jørgensen, Ottar Hovind (Deputy Managing Director), Ingvild Myhre (Chair of the Board), Aslak Tveito (Managing Director), Pinar Heggernes, Mats Lundqvist, Annik Myhre. **Not pictured:** Ernst G. Gran, Tormod Hermansen, Silvija Seres, Yngvild Wasteson, Ingolf Søreide

## Annual report 2013

*Simula Research Laboratory AS is part of the Simula Group and conducts fundamental long-term research on selected aspects of software and communications technologies, with the aim of contributing to creativity and innovation in business.*

In its 12th operating year, Simula Research Laboratory AS and Simula Group achieved a turnover of NOK 110.8 million and NOK 135.3 million, and net profits of NOK 4.3 million and NOK 4.2 million, respectively.

### **Administration and Organisation**

Simula is organised as a limited company under the ownership of the Norwegian Ministry of Education and Research. The company combines academic traditions with recognised business management models.

Simula Research Laboratory AS (Simula) is the parent company of Kalkulo AS, Simula Innovation AS and Simula School of Research and Innovation AS. Kalkulo and Simula Innovation are wholly-owned subsidiaries, while Simula School of Research and Innovation is owned by

Simula (56%), Statoil (21%), the Municipality of Bærum (14%), Telenor (7%), the Norwegian Computing Center (1%), and Sintef (1%).

The parent company and its three subsidiaries cooperate closely, and are located at IT Fornebu, in the Municipality of Bærum.

### **Activities**

Simula conducts fundamental long-term research on communications in computer and mobile networks, scientific computing, and methods for developing and testing complex software systems. Our research focuses on fundamental challenges that combine technological development with utility value for industry and society as a whole.

Simula's research is published in international scientific journals and by leading non-fiction publishing companies. In 2013, Simula's research featured in 57 articles in international journals, six books, two chapters in books and 74 peer reviewed conference articles.

Over the course of 2013, Simula's scientific employees supervised 6 doctoral candidates and 11 Master's students to the successful completion of their degrees. The University of Oslo is an important partner and granted most of these degrees.

### **Personnel and HSE**

At the end of 2013, Simula Group had a total of 140 employees, with 109 in full-time positions and 31 in part-time positions. Of these, 109 were men and 31 were women, with 68 Norwegians and

72 foreign nationals. 56 people were employed as research fellows, with 27 postdoctoral positions and 29 PhD students. At the end of 2013, Simula Research Laboratory had a total of 34 employees, with 21 in full-time positions and 13 in part-time positions. Of these, 29 were men and 5 were women, with 26 Norwegians and 8 foreign nationals.

The board aims to continue its focus on HSE for the long-term. Absence due to illness was under 1.6% in 2013, which is below average compared with similar companies. The Group will be working actively to keep sick leave at continued low levels. There were no reports of occupational diseases or accidents during the year. HSE incidents are now reported at each board meeting.

Simula's business activities do not pollute the external environment.

### **Equal Opportunity and Integration**

In 2009, Simula's board adopted an action plan that aimed to increase the proportion of female employees in scientific positions<sup>1</sup> to 25 per cent by 2015. We are pleased to note that we achieved that goal in 2013, with the proportion of female employees in scientific positions at 26 per cent, compared to 22 per cent in 2012, and 19 per cent in both 2011 and 2010. Within the various job categories, we see that the proportion of female researchers in permanent positions has increased from 0 in 2010 to 14 per cent in 2013. Among the PhD students and postdoctoral fellows, the proportion for 2013 was 33 and 28 per cent, respectively.

As we have already achieved our original goal for 2015, we have set a new target of achieving a proportion of 30 per cent female employees in scientific positions by year-end 2017.

Simula will continue to work actively and systematically to improve the gender balance within the organisation. We are very pleased to note that Simula was awarded the Gender Equality Award for 2013 by the Norwegian Ministry of Edu-

cation and Research. This recognition and the financial support of NOK 2 million that comes with the award will give us a good basis for further work. To meet our new target, Simula will continue to focus on initiatives for both recruiting new and talented female candidates, and developing and adapting work situations for qualified women already employed by Simula.

The Group is also working to promote the objectives of the Anti-Discrimination Act, to promote equality, ensure equal opportunities and rights and to prevent discrimination in the workplace. There are over 30 different nationalities represented in Simula Group. Over 50 per cent of the Group's employees come from outside Norway. Simula offers courses in Norwegian, social events and assistance with regard to visas, taxes, living accommodations and other administrative issues.

### **Ethics**

Simula follows ethical guidelines as described in "The Simula Code of Ethics", which also comprises research ethics, based on the fact that Simula is an institution dedicated to truth and the pursuit of truth. The institution's reputation is dependent on others being able to trust that research results are correct and have been produced in a verifiable and ethically responsible manner. For questions regarding research ethics, Simula's researchers are to adhere to the guidelines set by the National Committee for Research Ethics in Science and Technology (NENT). In addition, all employees must follow Simula's internal guidelines for scientific publishing, which are based on the Vancouver Convention.

### **Risk**

The Board considers financial risk, credit risk and liquidity risk to be low, and thus concludes that risks to the organisation are generally low.

### **Financial performance**

Simula Group saw an increase in both personnel and capacity in 2013. In its

12th operating year, the group had a turnover of NOK 135.3 million, an increase of 1% from the previous year. Operating results were NOK 3.0 million, with a net profit of NOK 4.2 million.

Simula Research Laboratory AS had a total operating revenue of NOK 110.8 million in 2013. External project funding was a total of NOK 53.5 million. The net profit for the year was NOK 4.3 million, which was transferred to other equity. Equity in Simula Research Laboratory AS constitutes NOK 18.2 million, corresponding to an equity ratio of 30% of total assets.

Simula School of Research and Innovation AS had a total operating revenue of NOK 45.3 million in 2013, with a net loss of NOK 1.4 million.

Simula Innovation AS had a total operating revenue of NOK 6.8 million, with a net profit after tax of NOK 200,000 in 2013.

In 2013, Kalkulo's total operating revenues amounted to NOK 13.2 million, with a net profit after tax of NOK 500,000.

### **Future Development**

The board believes that our annual accounts provide a correct picture of Simula Research Laboratory AS and the Group. The Group is in a healthy economic and financial position. In accordance with section 3, paragraph 3a of the Norwegian Accounting Act, conditions for continuing operations are confirmed present, and the annual accounts are prepared accordingly.

### **The work of the board of directors**

Simula's board has had three meetings and a board seminar in 2013. Cooperation between the board and management is good. The board would like to thank all employees for their strong contributions throughout the year.

Fornebu, 5 March 2014

<sup>1</sup> PhD students, postdoctoral fellows and researchers.

# Profit and loss statement 2013

2012	2013		Note	2013	2012
<b>GROUP</b>				<b>PARENT COMPANY</b>	
134 080 436	135 300 588	<b>OPERATING REVENUES</b>	6	110 760 499	106 701 983
		<b>OPERATING EXPENSES</b>			
85 295 420	91 079 841	Salary and social costs	5	68 028 044	63 254 487
1 360 261	1 979 236	Depreciation	3	1 728 824	1 151 677
37 727 159	39 248 310	Other operating expenses	5, 14	37 997 272	40 013 438
124 382 840	132 307 387	<b>TOTAL OPERATING EXPENSES</b>		107 754 140	104 419 602
9 697 596	2 993 201	<b>OPERATING PROFIT</b>		3 006 359	2 282 381
		<b>FINANCIAL ITEMS</b>			
488 244	464 796	Other interest income		294 796	377 562
101 769	2 104 210	Other financial income		1 989 698	55 903
-	366 383	Write down of shares		-	-
165 597	339 077	Other interest expense		320 421	155 689
417 704	819 697	Other financial expense		702 802	353 860
6 712	1 043 849	<b>NET FINANCIAL ITEMS</b>		1 261 271	- 76 084
9 704 308	4 037 050	<b>PROFIT BEFORE TAXES</b>		4 267 630	2 206 297
1 113 196	435 572	<b>TAXES FOR THE YEAR</b>		-	-
8 591 112	3 601 478	<b>NET PROFIT</b>		4 267 630	2 206 297
- 1 592 839	602 537	Minority interests		-	-
6 998 273	4 204 015	<b>Result after minority interest</b>		4 267 630	2 206 297
		<b>TRANSFERS</b>			
		Transferred to other equity		4 267 630	2 206 297





# Notes to the accounts

## **Note 1 – Accounting principles**

The financial statements have been prepared pursuant to the regulations in the Norwegian Accounting Act of 1998. The statements have been drawn up in accordance with Norwegian accounting standards.

### **The main rule for the valuation and classification of assets and liabilities**

Assets intended for permanent ownership or use are classified as fixed assets. Other assets are classified as current assets. Receivables to be repaid within one year are always classified as current assets. The same criteria are applied to the classification of short- and long-term liabilities.

Fixed assets are valued at acquisition cost and written down to their fair value, if the fall in value is believed to be permanent. Fixed assets are depreciated over the useful life of the asset. Long-term liabilities are recognised at nominal value on the date the liability was incurred. Long-term liabilities are not revalued to fair value with respect to interest rate fluctuations.

Current assets are valued at cost, or fair value, whichever is the lower. Current liabilities are recognised at their nominal values on the date they were incurred. Current liabilities are not restated to fair values with respect to interest rate fluctuations.

Certain items are valued according to other rules, as explained below.

### **Foreign currency transactions**

Assets and liabilities in foreign currency are translated into Norwegian kroner at the mid-rates quoted by Norway's National Bank on the balance sheet reporting day.

## **Tangible fixed assets**

Tangible fixed assets are generally depreciated over the expected useful life of the asset. Depreciation is generally done on a straight-line basis over the expected useful life of the asset.

## **Receivables**

Accounts receivable and other receivables are recorded at nominal amounts less provisions for anticipated losses from bad debts. Provisions for losses are based on individual assessments of the collectability of each receivable. In addition, if necessary, a general provision is made for anticipated bad debts on other receivables.

## **Pensions**

A straight line earning profile is used to account for pensions and assumptions are made regarding expected salary upon retirement.

## **Taxes**

The company has no tax expenses in the parent company accounts since its activities are not considered taxable.

## **Principles for income recognition**

Revenue is recognised when income delivery has taken place.

## **Group**

The group consists of the parent company Simula Research Laboratory AS and the subsidiaries Simula School of Research and Innovation AS, Simula Innovation AS and Kalkulo AS. The group accounts are prepared as if the group is one financial unit. Transactions and balances between the companies in the group are eliminated.

## **Note 2 – Financial market risk**

The company has little exposure to financial market risk.



### Note 3 – Fixed assets

#### Simula Research Laboratory AS

	Computer equipment	Furniture/ Fittings, equipment	Total
Acquisition cost Jan. 1	5 074 778	15 560 768	20 635 546
Acquired in 2013	358 873	323 897	682 770
<b>Acquisition cost Dec. 31</b>	<b>5 433 651</b>	<b>15 884 665</b>	<b>21 318 316</b>
Acc. depreciation	5 054 615	8 967 692	14 022 307
<b>Net book value Dec. 31</b>	<b>379 036</b>	<b>6 916 973</b>	<b>7 296 009</b>
Depreciation for the year	352 273	1 376 551	1 728 824
Depreciation %	20 – 50%	20 – 33%	

#### Simula Research Laboratory AS – Group

	Computer equipment	Furniture/ Fittings, equipment	Total
Acquisition cost Jan. 1	6 074 357	15 560 768	21 635 125
Acquired in 2013	375 139	323 897	699 036
Disposed of in 2013	-	-	-
Acquisition cost Dec. 31	6 449 496	15 884 665	22 334 161
Acc. depreciation	5 877 618	8 967 692	14 845 310
Net book value Dec. 31	571 878	6 916 973	7 488 851
Depreciation for the year	602 684	1 376 551	1 979 236
Depreciation %	20 – 50%	20 – 33%	

### Note 4 – Pension costs

The Group has a pension plan that covers all employees in the parent company and in the Group. The pension plan provides defined future benefits. Pension benefits depend on the individual employees' number of years of service, salary level upon retirement age, and social security benefits. The collective pension agreement is funded by building up pension funds under the management of the Norwegian Public Service Pension Fund.

The company has taken out a pension insurance for the managing director expensed at NOK 1 043 089,-.

**Note 5 – Cost of labour, number of employees, remuneration, etc.**

Salary and social costs	SRL AS		Simula Group	
	2013	2012	2013	2012
Salaries	21 577 058	24 011 596	70 800 080	66 621 592
Social security	3 313 228	4 109 722	10 726 327	10 298 899
Pension costs	3 125 545	1 965 334	5 732 376	4 072 991
Other benefits	3 138 312	3 866 343	3 821 060	4 301 938
Contribution to cover cost of labour at SSRI	22 643 339	17 444 982	-	-
Contribution to cover cost of labour at SI	14 230 562	11 856 510	-	-
<b>Total</b>	<b>68 028 044</b>	<b>63 254 487</b>	<b>91 079 841</b>	<b>85 295 420</b>
Average man-years of labour	23	35	115	109

Benefits to top management	SRL AS	Simula Group
Managing director	1 609 021	-
Other remuneration to managing director	235 888	-
Pension costs to managing director	1 147 730	-
Board of directors fees	385 000	-
Audit fees to Auditor	64 800	176 900
Other fees to Auditor	67 900	135 200

**Note 6 – Operating revenue**

	SRL AS	Simula Group
Research Funding	51 000 000	56 000 000
Subsidies from the Research Council of Norway and the EU	53 747 360	55 980 577
Services to subsidiaries	5 987 934	-
Other income	25 205	8 346 814

**Note 7 – Share capital and ownership structure**

The company's share capital consists of 800 shares with a nominal value of NOK 1 500 per share.

The shares are owned by: The Norwegian state, represented by the Ministry of Research and Education.

**Note 8 – Equity**

SRL AS	Share Capital	Other Equity	Total equity
Equity at Jan. 1	1 200 000	12 704 082	13 904 082
Profit for the year	-	4 267 630	4 267 630
Equity at Dec. 31	1 200 000	16 971 711	18 171 711

Simula Group	Share Capital	Other Equity	Minority Interests	Total Equity
Equity at Jan. 1	1 200 000	24 211 770	4 023 708	29 435 478
Profit for the year	-	4 204 015	-602 537	3 601 478
Equity at Dec. 31	1 200 000	28 415 785	3 421 171	33 036 956

## Note 9 – Bank deposits

The company had withheld funds of NOK. 2 712 037,- in connection with rent of office space and NOK 1 028 862,- in withholding taxes. The Group's withholding of employee taxes is NOK 3 327 313,-.

## Note 10 - Subsidiaries

	Office location	Ownership equity	Net book at Dec. 31	Company Dec. 31	Company value
Simula Innovation AS	Fornebu	100 %	4 356 300	6 577 981	180 447
Kalkulo AS	Fornebu	100 %	406 000	5 875 061	513 531
Simula School of Research and Innov. AS	Fornebu	55,74%	557 400	7 731 903	-1 360 128

## Note 11 – Transactions within the Group

	2013	2012
Receivable on Simula Innovation AS	14 769 010	2 724 804
Payable to Simula Innovation AS	-	1 478 544
Receivable on Kalkulo AS	27 076	166 319
Payable to Kalkulo AS	-	92 236
Receivable on Simula School of R. and I. AS	428 387	700 737
Payable to Simula School of R. and I. AS	-	1 886 828
Contribution to Simula School of R. and I. AS	21 912 393	17 436 836
Purchase of services from Simula Innovation AS	20 531 219	17 973 810
Purchase of services from Kalkulo AS	1 809 015	1 243 623
Purchase of services from Simula School of R. and I. AS		-
Sale of services to Simula Innovation AS	884.000	1 872 894
Sale of services to Kalkulo AS	1 771 155	1 778 575
Sale of services to Simula School of R. and I. AS	3 189 773	2 901 675

## Note 12 – Shares

	No.	Nominal value per share	Purchase price
Expert Analytics AS	5.294	1,00	600 000
Testify AS	44.433	1,00	1 427 117
Expertware AS	30.000	1,00	31 914
Symphonical AS	1.005.528	0,10	1 325 151
Intelliview AS	15	500,00	1 000 000
Edgefolio AS	9.500	0,4785	300 000
Radytek	34		3 045
Insilicomed Inc, USA	131.945	USD 1,80	1 220 755
Celerway Communication AS	22.500	1	3 017 745
Write down of shares			2 545 905
			6 379 822



### Note 13 – Tax

The activities of Simula Research Laboratory AS and its subsidiary, Simula School of Research and Innovation AS are not considered taxable. The subsidiaries Simula Innovation AS and Kalkulo AS are both liable to taxation.

<b>Taxation for the year consists of:</b>		<b>Deferred tax liabilities/asset</b>		
Tax payable	492 842		<b>1.1.</b>	<b>31.12.</b>
Change in deferred tax	-57 270	Assets	-18 474	-43 361
Net tax expense	435 572	Write down of shares	-1 220 754	-1 220 754
		Other differences	983 618	769 098
<b>Tax payable for the year is calculated as follows:</b>		Net deferred tax basis	-255 610	-495 017
Profit before tax	1 129 550	Net deferred tax assets	-71 572	-133 654
Permanent differences	391 192	Deferred tax assets, not recognised	301 109	305 921
Change in temporary differences	239 407	Deferred tax, recognised	229 537	192 267
Taxable income	1.760 149			
Tax payable	492 842			

### Note 14 – Leases

The company has signed leases for four photocopiers that all expire in 2014, 2016, 2017 and 2018. The company also has leases for two coffee machines, where one will expire in 2014 and the other in 2015. Leasing expenses amounted to NOK 690 467 in 2013.

The company has signed a leasing contract for a car for the managing director, which expires in 2015. Leasing expenses amounted to NOK 136 035 in 2013.

### Note 15 - Pledged securities

Assets pledged as security for liabilities in the parent company amounts to NOK 4 500 002,-. Plant and machinery is pledged to the amount of NOK 2 500 000 and receivables to NOK 5 000 000. The book value of pledged assets amounts to NOK 12 621 063,-.

# Cash flow statement

## GROUP

## PARENT COMPANY

2013	2012		2012	2013
		<b>Cash flow from operating activities:</b>		
3 601 478	8 591 112	Net profit for the year	2 206 297	4 267 630
2 345 619	1 360 261	Depreciation	1 151 677	1 728 824
6 382 556	-3 784 744	Change in receivables	- 2 500 153	-7 102 378
6 420 546	-823 438	Change in current liabilities	- 2 574 516	12.599 146
<b>18 750 199</b>	<b>5 343 191</b>	<b>Net cash flow from operating activities</b>	<b>-1 716 695</b>	<b>11 493 222</b>
		<b>Cash flow from investment activities:</b>		
-699 036	-8 408 531	Investments in property, plant and equipment	-7 857 226	-672 922
-5 480 159	-967 814	Investment in/sale of shares	-	-
<b>-6 179 195</b>	<b>-9 376 345</b>	<b>Net cash flow from investment activities</b>	<b>- 7 857 226</b>	<b>-672 922</b>
		<b>Cash flow from financing activities:</b>		
-	5 000 000	Long-term loan	5 000 000	-
-333 332	-166 666	Repayment of loans	-166 666	-333 332
-57 270	-57 183	Change in deferred taxes	-	-
-390 602	4 776 151	Net cash flow from financing activities	4 833 334	-333 332
12 180 401	742 997	Net cash flow for the year	-4 740 587	10 486 968
28 745 122	28 002 125	Cash reserves at Jan. 1	18 369 526	13 628 939
<b>40 925 523</b>	<b>28 745 122</b>	<b>Cash reserves at Dec. 31</b>	<b>13 628 939</b>	<b>24 115 907</b>

# Audit Report



Til generalforsamlingen i  
SIMULA RESEARCH LABORATORY AS

## REVISORS BERETNING FOR 2013

### Uttalelse om årsregnskapet

Vi har revidert årsregnskapet for SIMULA RESEARCH LABORATORY AS som består av selskapsregnskap, som viser et overskudd på kr. 4.267.630,-, og konsernregnskap, som viser et overskudd på kr. 4.204.015,-. Selskapsregnskapet og konsernregnskapet består av balanse per 31. desember 2013, resultatregnskap og kontantstrømoppstilling for regnskapsåret avsluttet per denne datoen, og en beskrivelse av vesentlige anvendte regnskapsprinsipper og andre noteopplysninger.

### Styret og daglig leders ansvar for årsregnskapet

Styret og daglig leder er ansvarlig for å utarbeide årsregnskapet og for at det gir et rettviseende bilde i samsvar med regnskapslovens regler og god regnskapsskikk i Norge, og for slik intern kontroll som styret og daglig leder finner nødvendig for å muliggjøre utarbeidelsen av et årsregnskap som ikke inneholder vesentlig feilinformasjon, verken som følge av misligheter eller feil.

### Revisors oppgaver og plikter

Vår oppgave er å gi uttrykk for en mening om dette årsregnskapet på bakgrunn av vår revisjon. Vi har gjennomført revisjonen i samsvar med lov, forskrift og god revisjonsskikk i Norge, herunder International Standards on Auditing. Revisjonsstandardene krever at vi etterlever etiske krav og planlegger og gjennomfører revisjonen for å oppnå betryggende sikkerhet for at årsregnskapet ikke inneholder vesentlig feilinformasjon.

En revisjon innebærer utførelse av handlinger for å innhente revisjonsbevis for beløpene og opplysningene i årsregnskapet. De valgte handlingene avhenger av revisors skjønn, herunder vurderingen av risikoene for at årsregnskapet inneholder vesentlig feilinformasjon, enten det skyldes misligheter eller feil. Ved en slik risikovurdering tar revisor hensyn til den interne kontrollen som er relevant for selskapets utarbeidelse av et årsregnskap som gir et rettviseende bilde. Formålet er å utforme revisjonshandlinger som er hensiktsmessige etter omstendighetene, men ikke for å gi uttrykk for en mening om effektiviteten av selskapets interne kontroll. En revisjon omfatter også en vurdering av om de anvendte regnskapsprinsippene er hensiktsmessige og om regnskapsestimaterne utarbeidet av ledelsen er rimelige, samt en vurdering av den samlede presentasjonen av årsregnskapet.

Etter vår oppfatning er innhentet revisjonsbevis tilstrekkelig og hensiktsmessig som grunnlag for vår konklusjon.

### Konklusjon

Etter vår mening er årsregnskapet avgitt i samsvar med lov og forskrifter og gir et rettviseende bilde av selskapets og konsernet SIMULA RESEARCH LABORATORY AS' finansielle stilling per 31. desember 2013 og av resultatet og kontantstrømmen for regnskapsåret som ble avsluttet per denne datoen i samsvar med regnskapslovens regler og god regnskapsskikk i Norge.



#### **Uttalelse om øvrige forhold**

##### Konklusjon om årsberetningen

Basert på vår revisjon av årsregnskapet som beskrevet ovenfor, mener vi at opplysningene i årsberetningen om årsregnskapet, forutsetningen om fortsatt drift og forslaget til anvendelse av overskuddet er konsistente med årsregnskapet og er i samsvar med lov og forskrifter.

##### Konklusjon om registrering og dokumentasjon

Basert på vår revisjon av årsregnskapet som beskrevet ovenfor, og kontrollhandlinger vi har funnet nødvendig i henhold til internasjonal standard for attestasjonsoppdrag (ISAE) 3000 «Attestasjonsoppdrag som ikke er revisjon eller forenklet revisorkontroll av historisk finansiell informasjon», mener vi at ledelsen har oppfylt sin plikt til å sørge for ordentlig og oversiktlig registrering og dokumentasjon av selskapets regnskapsopplysninger i samsvar med lov og god bokføringsikk i Norge.

Oslo, den 5. mars 2014



Erik A. Bell  
Statsautorisert revisor

# Social Responsibility and Working Environment

*Simula is a nonprofit public utility enterprise. The company contributes to society by engaging in basic long-term research within the fields of communication systems, scientific computing, and software engineering. In addition, Simula conducts education and fosters innovation on basis of the research. To reach its goals, Simula is continuously working to ensure good working conditions. The following summary highlights some of the topics Simula is addressing in order to maintain and develop its standards within ethics, gender balance, and general working conditions.*

## Ethics

Maintaining high ethical standards has a value in itself for both Simula and each individual employee is part of Simula's responsibility as a contributor to Norwegian society, and it is a fundament for trust from the outside world. Simula's code of ethics has been developed with the purpose to increase awareness of, and compliance with, the high ethical standards required of the employees. The code of ethics includes topics such as research ethics; the working environment and inclusion; gifts, enticements and corruption; confidentiality; and conflicts of interest.

## Equality and diversity

It is an important objective for Simula to be a work place where men and women are given the same opportunities for professional and personal development.

In order to strengthen the focus and to follow up on the promising results shown in our previous work on improving the balance, Simula will continue to focus on initiatives for both recruiting new and talented female candidates, and for developing and adapting work situations for qualified women. Simula will pursue the goal of minimum 30 per cent female contingent among scientific staff by 2017.

Simula's workplace is diverse in both cultural and national origin, and currently more than 50 per cent of the employees are from countries outside Norway. The employees represent more than 30 different nationalities. Simula

takes different measures to make the transition to a Norwegian workplace effective and positive, including administrative support and Norwegian language training.

## Working environment

Simula aspires to be an excellent workplace. This is ensured through an internal inspection system that addresses health, safety and the working environment. The Working Environment Committee at Simula makes efforts to develop and maintain the quality of the working environment. It participates in planning, and follows up questions concerning the safety, health and welfare of the employees.

Simula has entered into an agreement with NAV (the Norwegian Labour and Welfare Organisation) concerning "the inclusive workplace". The purpose of the agreement is to prevent and reduce absence related to illness, strengthen job attendance and improve the working environment, as well as avert exclusion and withdrawal from working life. An action plan with focus on how Simula addresses these matters is discussed with NAV annually.

## Competence development and recruitment

Simula needs competent and motivated employees with specific expertise in order to reach its targets. Simula works continuously to attract, develop and retain talented employees with varied backgrounds.

The Simula School of Research and

Innovation facilitates professional and personal development to enhance expertise, also including courses on the communication of scientific content.

## Conflict resolution and notification of censurable conditions

Simula will ensure a safe and secure working environment in accordance with the company's principles on workplace culture. Simula has developed guidelines for conflict resolution and notification, meeting all the requirements in the personnel guidelines and the Working Environment Act. These guidelines encourages employees to take an active role in creating a working environment in which conflict is handled in an open, honest and constructive way, and in trying to prevent destructive forms of conflict from arising.

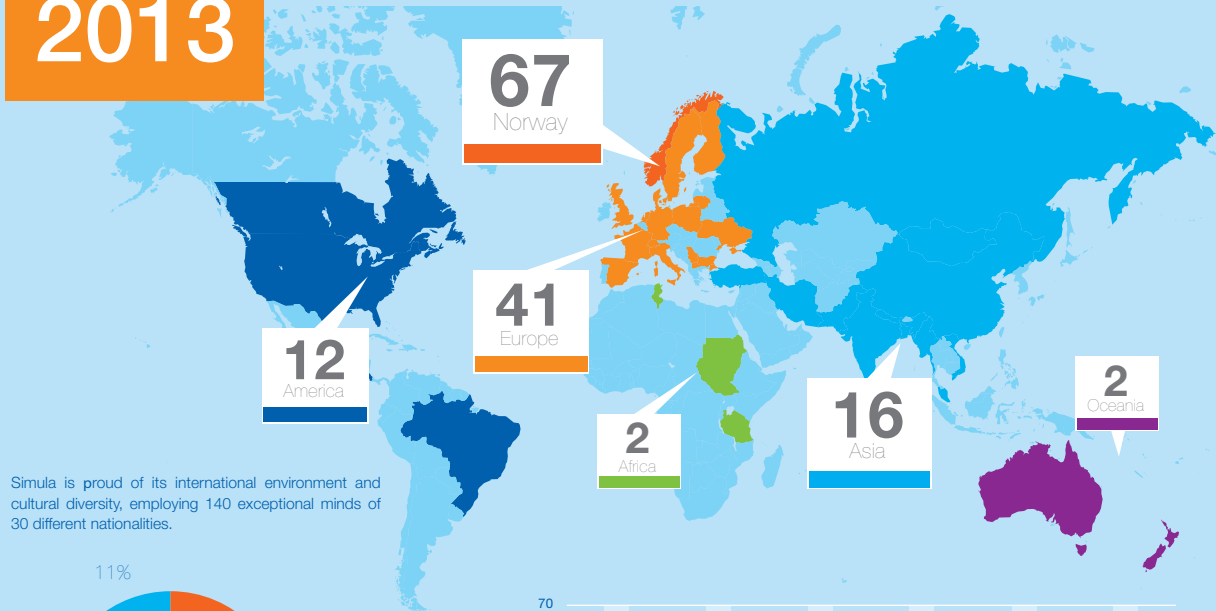
## External environment

Simula's activities do not pollute the external environment. In addition, Simula encourages environmentally responsible behavior through the way the company is run. Simula has a program for employees that choose not to drive a car to the workplace, by financially supporting their use of public transport. In 2013, on average 50 percent of the employees have been signed up for the program. Additionally, Simula has set a goal of being paper-free by 2015, in the sense that all administrative processes will be digital and the current total consumption of paper will be halved.

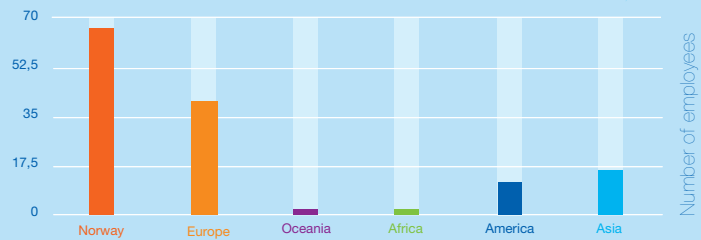
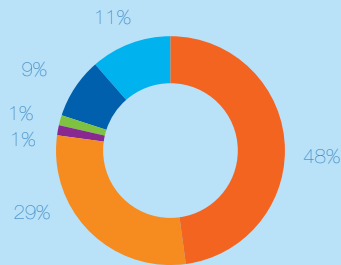


# Simula in numbers 2013

## Employee citizenship



Simula is proud of its international environment and cultural diversity, employing 140 exceptional minds of 30 different nationalities.



30 nationalities

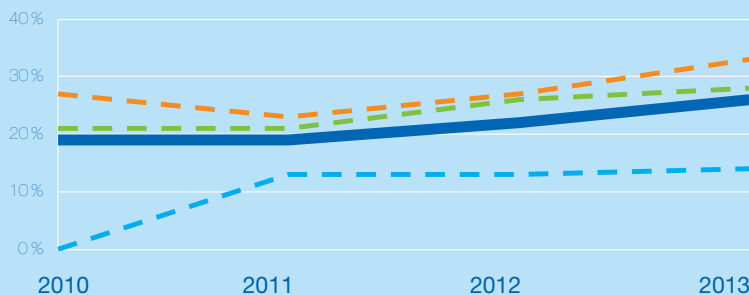
● Norway ● Europe ● Oceania ● Africa ● America ● Asia

# 140

## Gender Action Plan 2010 - 2017



	2010	2011	2012	2013
PhD candidates	27 %	23 %	27 %	33 %
Post docs	21 %	21 %	26 %	28 %
Researchers (full time)	0 %	13 %	13 %	14 %
Average	19 %	19 %	22 %	26 %



# ★ 26%

Average percentage 2013

Simula is aiming to have at least 30 per cent female employees in scientific positions by 2017. Simula will continue to work actively and systematically to improve the gender balance within the organisation. To meet our target, we will be implementing concrete initiatives for retaining good female candidates already employed by Simula, as well as attracting new and talented female candidates.

# Doctorates and Master's Degrees

*This list presents MSc and PhD degrees awarded by the University of Oslo and other degree awarding institutions in Norway and abroad. The degrees are obtained by candidates that are supervised throughout their projects by Simula researchers.*

Master's students	Supervisors	Thesis
Håkon Olav Østerbø	Kent-Andrè Mardal, Øyvind Evju, Martin S. Alnæs	The effects of heart rate on blood flow in intracranial aneurysms
Heidi V. Munthe-Kaas	Joakim Sundsnes	A Python interface to Diffpack-based classes and solvers
Henrik Kjus Alstad	Pål Halvorsen, Carsten Griwodz, Håkon K. Stensland, Vansidhar R.Gaddam	Towards real-time depth estimation for large spaces- A Soccer Case Study
Håvard Bauge	Pål Halvorsen	Secdroid: An Improved Alarm Distribution System
Espen O. Helgedagsrud	Pål Halvorsen, Carsten Griwodz, Håkon K. Stensland, Vansidhar R. Gaddam	Efficient implementation and processing of a real-time panorama video pipeline with emphasis on dynamic stitching
Anders Grotting Moe	Carsten Griwodz, Andreas Petlund, Pål Halvorsen	Implementing Rate Control in NetEm: Untying the NetEm/tc tangle
Mikkel Næss	Pål Halvorsen, Carsten Griwodz, Håkon K. Stensland, Vansidhar R. Gaddam	Efficient implementation and processing of a real-time panorama video pipeline with emphasis on colour correction
Marius Tennøe	Pål Halvorsen, Carsten Griwodz, Håkon K. Stensland, Vansidhar R. Gaddam	Efficient implementation and processing of a real-time panorama video pipeline emphasis on background subtraction
Ben C. Tomlin	Ragnhild Eg, Carsten Griwodz, Pål Halvorsen	Crowdsourcing Subjective Quality Assessment of Multimedia Content
Liping Huang	Carsten Griwodz, Stein Gjessing	Design of An Global Multicast Demonstrator for Live Video Streaming on Adobe's Flash Platform

Master's students	Supervisors	Thesis
Thomas G. Rolfsnes	Tao Yue, Magne Jørgensen, Razieh Behjati	Towards Automated Transformation of UML/OCL to Prolog for Efficient Configuration of Integrated Control Systems
Doctorates	Supervisors	Thesis
Tor Gillberg	Are Magnus Bruaset, Aslak Tveito, Christian Tarrou	Fast and accurate front propagation for simulation of geological folds.
Haakon Riiser	Pål Halvorsen, Carsten Griwodz	Adaptive Bitrate Video Streaming over HTTP in Mobile Wireless Networks.
Paul B. Beskow	Pål Halvorsen, Carsten Griwodz	Parallel programming models and run-time system support for interactive multimedia applications
Pål Grønsund	Paal E. Engelstad <sup>(1)</sup> Audun F. Hansen, Przemyslaw Pawelcza <sup>(2)</sup>	Cognitive Radio from a Mobile Operator's Perspective: System Performance and Business Case Evaluations.
Tomas Kupka	Pål Halvorsen, Carsten Griwodz	On the HTTP segment streaming potentials and performance improvements
Sabita Maharjan	Stein Gjessing <sup>(3)</sup> , Yan Zhang	Game Theoretic Approaches for Next Generation Networks

#### Footnotes:

(1) Department of Informatics, University of Oslo

(2) Delft University of Technology

(3) Department of Informatics, University of Oslo

# List of publications 2013

*Simula only reports publications where a significant part of the research has been funded by Simula. This means that at least one of the authors of the reported publications must have his/ her main affiliation with Simula, and has contributed to the publication as specified in Simula's publication guidelines. Publications from people in part-time positions at Simula are generally not counted unless the research is specifically performed as part of their employment at Simula. Such exceptions from the main rule are very few and must in all cases be approved by the head of department.*

## Books

- [1] M. Larson and F. Bengzon. *The Finite Element Method: Theory, Implementation, and Applications*, vol. 10. Springer, 2013.

## Edited books

- [2] S. Shirmohammadi, C. Griwodz, and G. Armitage. *Special issue on network and systems support for games*, vol. 19. Springer-Verlag, July 2013.
- [3] A. Gotlieb and zhenyu chen. *Proceedings of 13th International Conference on Quality Software 2013 (QSIC 2013), Nanjing, China, Jul. 2013*. CPS (Conference Publishing Services), July 2013.
- [4] L. Böszörményi and P. Halvorsen. *Proceeding of the 23rd ACM Workshop on Network and Operating Systems Support for Digital Audio and Video (NOSSDAV'13)*. ACM, February 2013.
- [5] A. Logg, K.-A. Mardal, and A. Massing. *Proceedings of the 26th Nordic Seminar on Computational Mechanics*. Published Electronically, October 2013.
- [6] A. M. Bruaset and A. Tveito. *Conversations About Challenges in Computing*. Springer, 2013.

## PhD theses

- [7] T. Gillberg. *Fast and accurate front propagation for simulation of geological folds*. PhD thesis, Faculty of Mathematics and Natural Sciences, University of Oslo, P.O box 1080 Blindern 0316 OSLO Norway, September 2013. <http://urn.nb.no/URN:NBN:no-41672>.
- [8] T. Kupka. *On the HTTP segment streaming potentials and performance improvements*. PhD thesis, University of Oslo, February 2013.
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- [10] H. Riiser. *Adaptive Bitrate Video Streaming over HTTP in Mobile Wireless Networks*. PhD thesis, University of Oslo, June 2013.

- [11] S. Maharjan. *Game Theoretic Approaches for Next Generation Networks*. PhD thesis, The University of Oslo, 2013.

- [12] P. R. Grønsund. *Cognitive Radio from a Mobile Operator's Perspective: System Performance and Business Case Evaluations*. PhD thesis, University of Oslo, October 2013.

## Articles in international journals

- [13] P. Farrell, D. Ham, S. Funke, and M. E. Rognes. Automated derivation of the adjoint of high-level transient finite element programs. *SIAM Journal on Scientific Computing*, 35(4):369–393, 2013.
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## Chapters in books

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- [189] G. T. Lines, O. M. Lysaker, and B. F. Nielsen. Observability of ischemia and the need for patient specific geometrical models in inverse ECG. Computing in Cardiology, Zaragoza, Spain, 2013.
- [190] M. E. Rognes. FEniCS on a Moebius strip. CBC seminar series, February 2013.
- [191] M. E. Rognes. Solving PDEs over manifolds with FEniCS. FEniCS'13, Cambridge, March 2013.
- [192] M. E. Rognes. An adjoint-enabled simulation framework for cardiac electrophysiology. CBC/CCI workshop "Advancing numerical technologies in the cardiac domain", May 2013.
- [193] T. Dreibholz and S. Ferlin-Oliveira. The NorNet Research Testbed, July 2013.
- [194] T. Gillberg. Developing and implementing parallel algorithms for fold simulations in 3D, February 2013.
- [195] K. Valen-Sendstad and D. A. Steinman. Impact of CFD Solution Strategy on Predicted Aneurysm Hemodynamics: Good News and Bad News. 8th International Symposium on Biomechanics in Vascular Biology and Cardiovascular Disease, Rotterdam, April 2013.
- [196] B. Kehlet. Quantifying the computability of the Lorenz system. International Conference on Adaptive Modeling and Simulation (ADMOS2013), June 2013.
- [197] M. Mortensen. Preliminary study of the impact of spinal cord nerve roots and denticulate ligaments on drug movement in the cervical spinal subarachnoid space. Nordic Seminar on Computational Mechanics, October 2013.
- [198] A. Yamashita. How Good are Code Smells for Evaluating Software Maintainability? - Results from a Comparative Case Study. Post-doctoral symposium at 29th IEEE International Conference on Software Maintenance (ICSM), 2013.
- [199] J. E. Hake. A General ODE translator (Gotran): Towards a versatile tool for general ODEs. CBC and CCI Workshop on Advancing Numerical Technologies in the Cardiac Domain, May 15, May 2013.
- [200] M. S. Alnæs. Data assimilation with Navier-Stokes splitting schemes and dolfin-adjoint. CBC and CCI Workshop on Advancing Numerical Technologies in the Cardiac Domain, May 15, May 2013.
- [201] A. Logg. The FEniCS Project - Organization, Practices, Maintenance and Distribution. CBC seminar series, March 2013.
- [202] M. S. Alnæs. Status of effective translation of complicated forms in FEniCS. CBC seminar series, March 2013 2013.

- [203] K. Valen-Sendstad. Impact of CFD Solution Strategy on Predicted Aneurysm Hemodynamics: Good News and Bad News. CBC seminar series, April 2013.
- [204] K.-H. Støverud. Effect of Oscillatory Cerebrospinal Fluid Pressure on the Spinal Cord Tissue. CBC seminar series, April 2013.
- [205] J. Sogn. Nitsche based methods for unfitted meshes for the Brinkman problem. CBC seminar series, October 2013.
- [206] A. R. Hope. Analysis of a System of Elliptic Partial Differential Equations and its Possible Boundary Conditions When Discretized with Hermite and Lagrange Elements. CBC seminar series, January 2013.
- [207] M. Sourouri. When One GPU Is Not Enough. HPC workshop, Simula Research Laboratory, Oslo, Norway, February 2013.
- [208] X. Cai. Scientific computing on accelerator-based supercomputers. Guest lecture at FFI, September 20, 2013.
- [209] X. Cai. Adopting heterogeneous hardware platforms for scientific computing. Guest lecture at Technical University of Denmark, December 5, 2013.
- [210] X. Cai. Introduction to Scientific Writing. Intensive course given at National University of Defence Technology, China, October 17-19, 2013.
- [211] M. Maleckar. Patient-specific modeling: how good do we have to be? TRM Forum 2013, December 1-3 2013, Lugano, Switzerland., December 2013.
- [212] K.-A. Mardal and B. F. Nielsen. Efficient preconditioning of optimality systems with non-self-adjoint state operators. IFIP 2013, minisymposia Preconditioning for PDE-Constrained Optimization, Linz, Austria, 2013.
- [213] D. Marijan. Managing test configurations in high-variability testing environments with TITAN and pure::variants. pure::variants Solutions Forum, SPLC, 2013.
- [214] A. Øslebø. Scalable Flow Analysis and Deep Packet Inspection. Proceedings of the 1st NorNet Users Workshop (NNUW-1), September 2013.
- [215] S. Baden. Computing at a million mobiles per second. National University of Defense Technology, Changsha, China, October 2013.
- [216] S. Baden. Computing at a million laptops per second. 21st High Performance Computing Symposia, San Diego, April 2013.
- [217] T. Dreibholz. The NorNet Project – a Research Testbed for Multi-Path Transport. Invited Talk at Technische Universität Berlin, August 2013.
- [218] M. Jørgensen and S. Grimstad. Dødssynder innen kostnadsestimering. Presentation at SMIDIG 2013, 2013.
- [219] M. Jørgensen and S. Grimstad. How much is a great developer worth? Presentation at Norwegian Developer Conference (NDC) 2013, 2013.
- [220] M. Jørgensen. How to avoid disappointments in software projects (and life). Presentation at Gilb Week (London), 2013.
- [221] E. Rathgeb. Distributed Detection of VoIP Fraud and Misuse – Tools and First Results. Proceedings of the 1st NorNet Users Workshop (NNUW-1), September 2013.
- [222] S. Wall. Cardiac Modelling and Applications. INRIA Sophia Antipolis, 2013.
- [223] T. Dreibholz. An Overview of the NorNet Testbed for Multi-Homed Systems, April 2013.
- [224] M. Mortensen. FEniCS: a Free Software for the Automated and Efficient Solution of Differential Equations. University of Waterloo, Department of Mechanical and Mechatronics Engineering, Seminar Series, Februar 2013.
- [225] M. Mortensen. FEniCS and its application in biomedical computing. Charles University in Prague, Czech Republic, November 2013.
- [226] H. P. Langtangen. Bringing Flow Simulations to the Clinic. Invited lecture at the Scientific Computing and Imaging Institute (SCI Institute), University of Utah, USA, March 2013.
- [227] T. Dreibholz. The NorNet Project - an Introduction to NorNet for the Site Deployment at NTNU Trondheim, April 2013.
- [228] H. Adhari. Practical Experiences with an Inter-Continental Testbed Setup for Multipath-Transport. Proceedings of the 1st NorNet Users Workshop (NNUW-1), September 2013.
- [229] Y. Zhang. Wireless Communications for Smart Grid. Green Wireless Communications - Newcom# Summer School, 2013.
- [230] Y. Zhang. Mobile Cloud Computing. UGAF Green IT School / University of Oslo, 2013.
- [231] Y. Zhang. Green Smart Grid. UGAF Green IT School / University of Oslo, 2013.
- [232] O. Lysne. Tjenesteavbrudd over mobilt bredbånd i Norge. Det Norske Videnskaps-Akademi Årbok 2012, 2013.
- [233] C. Paasch. Multipath TCP and Its Use-Cases in the NorNet Testbed. Proceedings of the 1st NorNet Users Workshop (NNUW-1), September 2013.
- [234] M. Welzl. Potential Applications of Shared Bottleneck Detection. Proceedings of the 1st NorNet Users Workshop (NNUW-1), September 2013.
- [235] T. Dreibholz. An Overview of NorNet Core, March 2013.
- [236] T. Dreibholz. An Introduction to NorNet for the Site Deployment at Høgskolen i Narvik, March 2013.
- [237] K.-A. Mardal. On the assumption of laminar flow in the modeling of physiological flow. Modelling of physiological flows (MPF 2013), 2013.
- [238] K.-A. Mardal. Operator preconditioning for well-posed and ill-posed problems. Preconditioning 2013, 2013.
- [239] M. Jørgensen. Judgement and decision-making in software engineering. Presented at QSIC 2013, Nanjing, China, July 2013.
- [240] M. Jørgensen. Finding results where there are none. IWSM-MENSURA, Ankara, Turkey, 2013.

- [241] C. Griwodz. Transport layer interactions of adaptive HTTP streaming. Keynote talk at International workshop on Control Techniques for Efficient Multimedia Delivery (CTEMD), at Globecom 2013, December 2013.
- [242] D. Baltrūnas. The NorNet Edge Testbed for Mobile Broadband Measurements. Proceedings of the 1st NorNet Users Workshop (NNUW-1), September 2013.
- [243] H. P. Langtangen. Building Simulation Software for the Next Decade: Tools and Trends. International Workshop on Mantle and Lithosphere Dynamics, Klækken hotel, Norway, September 2013.
- [244] Y. Zhang. Green and Secure Smart Grid. MACOM 2013 conference keynote, 2013.
- [245] T. Dreibholz. The NorNet Core Testbed – Introduction and Status. Proceedings of the 1st NorNet Users Workshop (NNUW-1), September 2013.
- [246] M. Maleckar, G. T. Lines, J. Koivumäki, K. Calloe, and J. Cordeiro. NS5806 partially restores APD but fails to ameliorate  $Ca^{2+}$  transient dysfunction in a computational model of canine heart failure, October 2013.
- [247] M. Maleckar, G. T. Lines, and J. Koivumäki.  $Ca^{2+}$ -transient dysfunction and ion channel therapy: what can we gather from a computational model of canine heart failure? EHRA Scientific Sessions, 37th Annual Meeting of the ESC Working Group on Cardiac Cellular Electrophysiology, July 2013.
- [248] C. Mair, M. Shepperd, and M. Jørgensen. Cognitive bias remains after de-biasing information. APA annual convention, July 2013.
- [249] O. L. Elvetun and B. F. Nielsen. PDE-constrained optimization problems with box constraints; Effective solution and real world applications. Applied Inverse Problems, Daejeon, South Korea, 2013.
- [250] S. R. Clark. South Atlantic Spreading Velocities and Timescales, December 2013.
- [251] B. L. de Oliveira, S. Wall, and J. Sundnes. The Effects of Mechanoelectrical Feedback on Conduction Velocity: a computational study. Cardiac Physiome Workshop, 2013.
- [252] R. Nerlich, S. R. Clark, and H.-P. Bunge. Testing the linkage between the Galapagos hotspot and the Caribbean large igneous province (CLIP) based on a globally consistent plate kinematic model. EGU, 2013.
- [253] A. Brunström, A. Petlund, and M. Rajjullah. Reducing Internet Transport Latency for Thin Streams and Short Flows, 7 2013.
- [254] J. Koivumäki, M. Maleckar, and P. Tavi. Mechanisms Promoting Chronic Atrial Fibrillation: Role of Remodelled Intracellular Calcium Handling and Cellular Hypertrophy. Gordon Research Conference on Cardiac Arrhythmia Mechanisms, February 2013.
- [255] J. Koivumäki, T. Christ, U. Ravens, and M. Maleckar. The controversial late INa in human atrial myocytes: a computational analysis of Ranolazine's effects. 37th Annual Meeting of the ESC Working Group on Cardiac Cellular Electrophysiology, June 2013.
- [256] M. Tennøe, E. O. Helgedagsrud, M. Næss, H. K. Alstad, H. K. Stensland, P. Halvorsen, and C. Griwodz. Realtime Panorama Video Processing Using NVIDIA GPUs. GPU Technology Conference, March 2013.
- [257] S. Hippchen, B. Ghorbal, C. Moder, and S. R. Clark. Revisited block boundaries in South America - a study of intraplate deformation. IAHS-IAPSO-IASPEI Joint Assembly, Gothenburg, July 2013.
- [258] C. Moder. Lithospheric Block Model as Test Bench for Plate Reconstructions and Plate-Mantle Coupling, 6 2013.
- [259] A. Said, C. Moder, B. Ghorbal, and S. R. Clark. Sediment accumulation history in the southern Mozambique marginal basin and vertical motion of the South African Plateau during Meso-Cenozoic time. EGU 2012, Vienna, Austria, April 2013.
- [260] M. Jørgensen. Estimering av IT-prosjekter: Hvorfor bommer vi og hvordan kan vi bli bedre? Presentation at five company internal seminars (KnowIT, Bouvet, Mesan, Politiet, Storebrand), 2013.
- [261] M. Jørgensen. Hvorfor (ikke) fastpris? Vinnerens forbannelse, informasjonsasymmetri, utvalgsrisiko, opportunistisk adferd og IT-kontrakter. Presented at internal seminar at Norsvin, 2013.
- [262] M. Jørgensen. From myths and fashions to evidence-based software engineering. Presented at internal seminars at OneCall, Deerwalk (Nepal), Thales and at Certus workshop (Simula), 2013.
- [263] M. Jørgensen. Offshoring av IT-utvikling: Hva er viktig for å lykkes? Presented at internal seminar at Telenor, 2013.
- [264] M. Jørgensen. Estimerer, usikkerhet, kommunikasjon. Hva er et estimat? Hvordan be om og kommunisere usikkerhet? Effekt av ulike avtaletyper. Presentation at internal seminar at Creuna, 2013.
- [265] M. Jørgensen. Det økonomisk mest fordelaktige tilbudet. Article in Computerworld, 2013.
- [266] M. Jørgensen. Lederkompetanse evaluert på 100 millisekunder. Article in Computerworld, 2013.
- [267] M. Jørgensen. Problemer med offshoring av IT. Kultur- eller kvalitetsproblemer? Article in Computerworld, 2013.
- [268] M. Jørgensen. Ustrukturerte ansettelsesintervjuer. Article in Computerworld, 2013.
- [269] M. Jørgensen. Presten Bayes, kravspesifikasjoner og skandalejournalisme. Article in Computerworld, 2013.
- [270] M. Jørgensen. Er "kopier og lim"-programmering skadelig? Article in Computerworld, 2013.
- [271] M. Jørgensen. Oppsiktsvekkende resultater. Article in Computerworld, 2013.
- [272] X. Cai. User-friendly Parallel Programming: Methodologies and Tools. Minisymposium at SIAM CSE'13, February 25, 2013.
- [273] T. Dreibholz. The NorNet Core Testbed – an Experiment Tutorial. Proceedings of the 1st NorNet Users Workshop (NNUW-1), September 2013.

