Curriculum vitae

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PERSONAL INFORMATION

Family name, First name: Bongo, Lars Ailo Aslaksen
Date of birth: *03.12.1978*
Sex: Male
Nationality: Norwegian
Researcher unique identifier(s): orcid.org/0000-0002-7544-2482
URL for personal web site: http://www.cs.uit.no/~larsab/
URL for lab web site: http://hdl.cs.uit.no/

EDUCATION

2008	PhD: *Reducing the network latency and bandwidth requirements of distributed and parallel applications*. Disputation date**:** *18.01.2008.*
	Dept. of Computer Science, University of Tromsø, Norway
2005-2006	Visiting research collaborator.
	Dept. of Computer Science, Princeton University, USA
2002	Master: *EventScope: configurable on-line monitoring of parallel and distributed applications*
	Dept. of Computer Science, University of Tromsø, Norway

CURRENT AND PREVIOUS POSITIONS

2019-	Startup co-founder
	3stepbio AS, Norway
2018-	Professor in Health Technology
	Dept. of Computer Science, UiT – The Arctic University of Norway
2010-2018	Associate Professor
	Dept. of Computer Science, UiT
2013-2018	Group leader
	Center for Bioinformatics, UiT
2013-	Startup founder
	Searas Bongo ENK, Norway
2008-2010	Postdoctoral researcher
	Lewis-Sigler Institute for Integrative Genomics, Princeton University, USA
2007-2008	Researcher.
	Dept. of Computer Science, University of Tromsø.
2003-2008	Research fellow.
	Dept. of Computer Science, University of Tromsø.
1999-2003	Teaching assistant (part time).
	Dept. of Computer Science, University of Tromsø.

FELLOWSHIPS AND AWARDS

2005-2006	Support for one year stay at Princeton University
	The Research Council of Norway

MOBILITY (*research stays abroad lasting more than three months*)

2008-2010	Lewis-Sigler Institute for Integrative Genomics, Princeton University, USA
	Award received from Princeton University, USA
2005-2006	Dept. of Computer Science, Princeton University, USA
	Award received from The Research Council of Norway

SUPERVISION OF GRADUATE STUDENTS AND RESEARCH FELLOWS

2010-	Number of current PhD students: 4 (3 as main advisor, 1 as co-advsior)
	Number of graduated PhD students: 4 (3 as main advisor, 1 as co-advisor)
	Number of current post docs: 1

Number of current master students: 1 (co-advisor)
Number of graduated master students: 18 (16 as main advisor, 2 as co-advisor)

TEACHING ACTIVITIES

At Dept. of Computer Science, UiT – The Arctic University of Norway:

2019	*Applied functional programming in .NET Core*. Responsible Professor.
2013-	*Concurrent and Data-Intensive Programming*. Responsible Professor. I developed the syllabus and assignments for this course.
2012-	*Operating Systems*. Responsible Professor or Lecturer.
2010- 2011	*Operating Systems*. Lecturer.
2011- 2012	*Algorithms II*. Responsible Professor.
2010	*Algorithms II*. Lecturer. I co-developed this course.
1999- 2007	*Operating Systems*; *Computer Architecture; Parallel Programming*. Teaching assistant.

At Dept. of Computer Science, Princeton University, USA:

2010	*Operating Systems*. Teaching assistant.

ORGANISATION OF SCIENTIFIC MEETINGS

2016	Organizer. Workshop in R programming (15 participants), UiT – The Arctic University of Norway.
2012	Co-organizer, Workshop in scientific scripting techniques (30 participants), UiT, Norway.
2011	NIK conference (115 attendees), Tromsø, Norway
2010-	Organizer of interdisciplinary lunch seminar series (20 participants) UiT, Norway.

INSTITUTIONAL RESPONSIBILITIES

2014-	Graduate student main advisor (M. Grønnesby, J.I. Arnes, R Nozal Cañadas, R. Johansen) UiT – The Arctic University of Norway
2012-2018	Graduate student main advisor (E. Pedersen, B. Fjukstad, E. Holsbø), UiT
2013-2017	Graduate student co-advisor (E.M. Robertsen), UiT
2013-2018	Substitute board member, Department of Computer Science, UiT
2012-2014	Head of teaching, Dept. of Computer Science, UiT
2012-	Leader of 5 PhD evaluation committees, UiT
2010-	Member of PhD, postdoc, and Assoc. Prof. position evaluation committees, UiT and Narvik University College, Norway

COMMISSIONS OF TRUST

2019-	Member, advisory board for student innovation at UiT.
2019	Member, advisory board. Omstilling. Kautokeino municipality.
2019-	Member, resource allocation committee, Sigma2
2018-	Work package co-leader, Population Studies in the North, UiT
2018-2019	Member, architecture expert group, digitalization strategy for Norwegian universities, UNIT
2018	Member, strategy document for IT-department, UiT
2018-	Member, steering group for Sami parents network in Tromsø.
2015-2019	Management committee member *COST Action IC1406* – cHiPSet
2014-2018	Substitute management committee member *COST Action IC1305* - NESUS
2015-2018	Task co-leader, WP6, H2020 INFRADEV ELIXIR-Excelerate
2015-2018	Task member, WP4, H2020 INFRADEV ELIXIR-Excelerate
2014	Member ELIXIR Programme of Work for Technical Services
2016-	Member, advisory board for cloud technology in Norwegian academic institutions
2017-	Member, advisory group for applications and systems at, IT-department, UiT
2015	Member, reference group for purchase of new HPC and Storage Systems in Norway
2012-2013	Member, committee for coordination of computer science master programs in Norway
2012-2015	Treasurer, NIK-stiftelsen
2012-2016	Program committee member, NIK 2010-2015, IASDS 2015.

2014-   Examiner University of Stavanger

MEMBERSHIPS OF SCIENTIFIC SOCIETIES
2017-   Digital Life Norway Research School
2014-   EPINOR national research school in population-based epidemiology
2016-   NORBIS national research school in bioinformatics, biostatistics, and systems biology
2000-   ACM, IEEE, ISCB

MAJOR COLLABORATIONS
International:
- Prof. Olga Troyanskaya (Laboratory for Bioinformatics and Functional Genomics) and Prof. Kai Li (Dept. of Computer Science), Princeton University: development of functional genomics analysis tools, pipelines, and infrastructure services.
- Dr. Rob Finn, leader Protein Families team, EMBL-EBI, UK: metagenomics data analysis pipeline development in ELIXIR-EXCLERATE.
- Prof. Michael Hallett and Dr. Vanessa Dumeaux, Centre for Bioinformatics, Concordia University, Canada: multi-level functional genomics analysis.
- Prof. Etienne Birmelé, MAP5, Sorbonne Paris Cite: development of machine learning methods.
- Dr. Tommi Nyrönen, CSC, FI: infrastructure development in the ELIXIR project.

UiT – The Arctic University of Norway:
- Profs. Eiliv Lund, Lill-Tove Busund, Tom Dønnem, Torkjel Sandanger and Assoc. Prof. Karina Standahl Olsen: Norwegian Women and Cancer project (NOWAC).
- Prof. Hasse Melbye: Lung sound analysis as part of «Befolkningsundersøkelser i Nord».
- Prof. Gunnar Thorvaldsen and Dr. Hilde Sommerseth: Historical data transcription and organizing.
- Associate Prof. Kristian Svendsen: adverse drug reaction data analysis.

CAREER BREAKS
2015   14 week paternity leave (April – July).
2011   12 week paternity leave (January – March).

PUBLICATIONS
47 total career publications; 39 since PhD; h-index 8; 662 citations. Selected recent publications:

1. M Voets, K Møllersen, **LA Bongo**. Reproduction study using public data of: Development and validation of a deep learning algorithm for detection of diabetic retinopathy in retinal fundus photographs. *PLoS ONE 14(6)*: e0217541. 2019.
2. C Jácome, J Ravn, E Holsbø, JC Aviles-Solis, H Melbye, **LA Bongo**. Convolutional neural network for breathing phase detection in lung sounds. *Sensors (Basel)*. 2019 Apr 15;19(8).
3. B Fjukstad, N Angelvik, M Grønnesby, M Wulff Hauglann, H Gunhildrud, FH Rasch, J Iversen, M Dalseng, **LA Bongo**. Teaching Electronics and Programming in Norwegian Schools Using the air:bit Sensor Kit. *In Proc. of ITiCSE* 2019.
4. B Fjukstad, V Dumeaux, M Hallett, **LA Bongo**. Reproducible Data Analysis Pipelines for Precision Medicine. *In Proc. of the 27th Euromicro International Conference on Parallel, Distributed, and Network-Based Processing*. 2019.
5. IA Raknes, **LA Bongo**. META-pipe Authorization service. *F1000Research 2018, 7(ELIXIR):32*.

Full list available at: http://bdps.cs.uit.no/publications.html

OPEN SOURCE SOFTWARE
More than 40 open source projects.

Full list available at: http://bdps.cs.uit.no/software.html

INVITED LECTURES
2019   Biomedical informatics research on healthcare. Bodø, Norway.
2019   UiT machine learning seminar. Tromsø, Norway.
2018   Radiografiens dag, University Hospital of Northern Norway, Tromsø, Norway.
2017   International Personal Data Systems Workshop (PDS 2017), Sommarøy, Norway.
2017   NorduGrid 2017. Tromsø, Norway.

2017	Talentskolen, Tromsø, Norway.
2016	ELIXIR Innovation and SME Forum: Data-driven innovation in the aquaculture and marine Industries, Oslo, Norway.
2015	Dataforeningen, Tromsø, Norway.
2012	NOTUR2012. Tromsø, Norway.

OUTREACH ACTIVITIES
2015- 2 webinars
2010- 33 talks (in total more than 90 talks by my lab members)
2014- 5 demos
Full list available at: http://bdps.cs.uit.no/outreach.html

GRANTS
1M NOK from NFR STUD-ENT. 2017. PI: J. Ravn.
591K NOK from NFR IKTPLUSS. 2017.
41K NOK from NFR AURORA. 2015.
500K NOK from NFR IKTPLUSS grant Lighthouse pre-project, PI: TF Bathen. 2015.
427K EUR from H2020-INFRADEV grant *ELIXIR-EXCELERATE*, WP leader: NP Willassen. 2015.
165K EUR from H2020-INFRADEV grant *EMBRIC*. WP leader: NP Willassen. 2015.
82.5K EUR from ELIXIR, *Pilot project*. PI's: NP Willassen and R Finn, 2014.
2M NOK from MABIT and RCN. PI: NP Willassen. 2011.
1M NOK from Tromsø Forskningsstiftelse. 2011.
Postdoc grant from UiT: 2018
PhD student grants from UiT: 2011, 2011, 2013, 2014, 2016, 2017, 2018

INDUSTRIAL INNOVATION
2019   3stepbio AS. Co-founder of startup providing bioinformatics cloud services.
2019   Disclosure of Invention: Adverse drug reactions monitoring (details not publicly available).
2018   Disclosure of Invention: Retina images (details not publicly available).
2017   Medsensio AS. Co-founder of startup providing methods and tools for lung sound analysis.
2017   Disclosure of Invention: Air pollution (details not publicly available).
2017   Disclosure of Invention: Lung sounds 2 (details not publicly available).
2015   Disclosure of Invention: Lung sounds (details not publicly available).
2013   Searas Bongo ENK: Founder of startup developing minority language digital education tools.

PRIZES AND AWARDS
2019	Supervisor of best master student thesis (Nina Angelvik) Dept. of Computer Science, UiT The Arctic University of Norway
2014	Supervisor of best master student thesis (Bjørn Fjukstad) Dept. of Computer Science, University of Tromsø, Norway
2013	Supervisor of best master student thesis (Martin Ernstsen) Dept. of Computer Science, University of Tromsø, Norway