**Curriculum vitae**

Last updated: 26.01319

**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://bdps.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**

*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 owner

Seaars 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: 2 (main advisor)

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 (main advisor)  
Number of graduated master students: 16 (14 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)  
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 4 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. Omstilling. Kautokeino municipality.

*2019-* Member, resource allocation committee, Sigma2

*2018-* Work package co-leader, Population Studies in the North, UiT

*2018-* 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-* 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).
* Profs. Nils Peder Willassen and Peik Haugen: Center for Bioinformatics and ELIXIR.
* 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**

44 total career publications; 36 since PhD; h-index 8; 633 citations. Selected recent publications:

1. Fjukstad B, Dumeaux V, Olsen KS, Hallett M, Lund E, **Bongo LA**. Building applications for interactive data exploration in systems biology. *in Proc. of ACM-BCB 2018*.
2. Fjukstad B, **Bongo LA**. A review of scalable bioinformatics pipelines. *Data Science and Engineering*, 2(3), 2017.
3. Dumeaux V, Fjukstad B, Fjosne HE, Frantzen JO, Holmen MM, Rodegerdts E, Schlichting E, Børresen-Dale AL, **Bongo LA**, Lund E, Hallett M. Interactions between the tumor and the blood systemic response of breast cancer patients. *PLoS Computational Biology*, 13(9), 2017.
4. ten Hoopen P, Finn RD, **Bongo LA,** Corre E, Fosso B, Meyer F, Mitchell A, Pelletier E, Pesole G, Santamaria M, Willassen NP, and Cochrane G. The metagenomics data life-cycle: standards and best practices. To appear in *GigaScience*, 2017.
5. Pedersen E, **Bongo LA**. Large-scale Biological Meta-Database Management*. Future Generation Computer Systems*. Vol 67. Feb 2017.

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* 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-* 31 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**

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**

*2017* 1M NOK Award for student startup (Johan Ravn)

Research Council of Norway, 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