Phuong H. Ha Curriculum vitae

Personal information

First name, Surname:	Phuong, Ha
Researcher unique identifier(s):	https://orcid.org/0000-0001-8366-5590
URL for personal website:	http://www.cs.uit.no/~phuong/

Education

Year	Faculty/department - University/institution - Country
2006	Ph.D. in Computing Science. Department of Computer Science, Chalmers
(dissertation defended)	University of Technology, Sweden

Positions - current and previous

Year	Job title – Employer - Country
2019 – present	Professor - UiT The Arctic University of Norway - Norway
2009 – 2019	Associate Professor - UiT The Arctic University of Norway - Norway
2006 – 2009	Postdoc - University of Tromsø - Norway
2001 – 2006	Doctoral Student - Chalmers University of Technology - Sweden

Mobility

Year	Title – Host - Country
10.2018 -	Guest Faculty - Lawrence Berkeley National Laboratory, University of California,
02.2019	Berkeley - USA
08.2013 -	Research Scholar - Rutgers University - USA
07.2014	

Project management experience

Phuong H. Ha is/ has been the principal investigator (PI) and co-PI of one EU FP7 research project, one EEA research project, three national research projects funded by the Research Council of Norway (RCN), nine university research projects (UiT) and nine research/arrangement activities funded by RCN and UiT. Below are selected international and national research projects:

Year	Project owner – Project – Role – Funder
2013 – 2016	Chalmers Univ. of Technology – EU FP7 ICT project EXCESS - Execution Models for Energy-
	Efficient Computing Systems – PI from Norway – EU
2020 - 2023	Univ. of Linkoping – EU H2020 ICT project TAILOR - Network of Research Centres for
	Foundations of Trustworthy AI — Network member — EU
2020 – 2023	Gdańsk Univ. of Technology – EEA POLNOR project HAPADS - Highly Accurate and
	Autonomous Programmable Platform for Providing Air Pollution Data Services to Drivers
	and Public – Institutional PI – EEA and Norway
2014 – 2019	Univ. of Tromsø – RCN FRIPRO project <i>PREAPP - Productivity and Energy-efficiency through</i>
	Abstraction-based Parallel Programming – PI – Research Council of Norway (RCN)
2017 – 2022	Simula - RCN INFRASTRUKTUR project eX3 - Experimental Infrastructure for Exploration of
	Exascale Computing – Institutional PI – Research Council of Norway
2017 – 2022	Univ. of Tromsø - RCN IKTPLUSS project <i>Distributed Arctic Observatory (DAO): A Cyber-</i>
	Physical System for Ubiquitous Data and Services Covering the Arctic Tundra – co-Pl –
	Research Council of Norway

Supervision of students

Master's	Ph.D.	University/institution - Country
students	students	

Phuong H. Ha Curriculum vitae

12 6 UiT The Arctic University of Norway - Norway	

Other relevant professional experiences

Year	Description - Role		
INSTITUTION	IAL RESPONSIBILITIES		
2018	Ph.D. graduate committee member, Chalmers University of Technology, Sweden		
2017	Review panel member for associate professor (permanent) positions, University College of Southeast Norway		
2009 -	Review panel member for postdoc/Ph.D. positions: more than 15 times, UiT The Arctic University of Norway, Norway		
ORGANIZATI	ON OF SCIENTIFIC MEETINGS		
2019	Workshop on Efficient Frameworks for Compute- and Data-intensive Computing, Norway – Organizer		
2016	Workshop on Energy-Efficient Computing from Embedded to HPC Computing Systems, Sweden – Co-organizer		
2015	EU Network of Excellence HiPEAC Computing System Week and Block Review, Norway – Co-organizer (~300 participants)		
2015	Energy-Efficient Distributed and Parallel Computing Workshop (FEEDBACK '15), Spain – Co-organizer		
2015	Intl. Conference on Advanced Computing and Applications (ACOMP '15), Vietnam – Publicity chairs		
2008	The 22nd IEEE Intl. Parallel and Distributed Processing Symposium (IPDPS '08), USA – Chair of the Software - Redundancy and Faults session		
MEMBERSHI	PS OF ACADEMIES / SCIENTIFIC SOCIETIES		
2015 -	EU Network of Excellence on High Performance and Embedded Architecture and Compilation (HiPEAC) - Full member		
2011- 2015	EU COST Action IC1001 - Transactional Memories: Foundations, Algorithms, Tools, and Applications (Euro-TM) - Norwegian representative in the Management		
2008 -	Association for Computing Machinery (ACM) - Professional member		
COMMISSIO	NS OF TRUST		
2007 -	Program Committee member: more than 25 times (among them AINA 2014, OPODIS 2011 and ICDCS 2010)		
2004 -	Reviewer for more than 50 journals and conferences (among them TPDS, JPDC, JDC, TACO, Supercomputing, ICDCS, IPDPS, PODC, PPOPP, RTSS, SPAA)		

Track record

Note that in parallel scientific computing and systems, top conference proceedings are as important as scientific journals.

Peer-reviewed	50+	20+ publications in top journals/conferences such as IEEE TPDS, IEEE TC,
journal/conference		JPDC, Algorithmica, PODC, PPoPP, PACT, IPDPS, Euro-Par, DISC and ESA.
publications		
Book chapters	1	
Patents	1	A patent filed in Norway in 2019.
Invited presentations	11	
H-index	14	Google Scholar (Jan. 2022)

The complete list of publications can be found at https://orcid.org/0000-0001-8366-5590

Phuong H. Ha Curriculum vitae

TEN SELECTED PUBLICATIONS

1. <u>P. H. Ha</u>, O. J. Anshus, I. Umar. Efficient concurrent search trees using portable fine-grained locality. IEEE Transactions on Parallel and Distributed Systems (TPDS), 30(7): 1580-1595, 2019.

- 2. P. Kumar, A. Gurtov, M. Sain, A. Martin, <u>P. H. Ha</u>. Lightweight Authentication and Key Agreement for Smart Metering in Smart Energy Networks. IEEE Transactions on Smart Grid, 10(4): 4349-4359, 2019.
- 3. V. Tran, T. Oines, A. Horsch, <u>P. H. Ha</u>. REOH: Using Probabilistic Network for Runtime Energy Optimization of Heterogeneous Systems. Proc. of the 24th IEEE Intl. Conf. on Parallel and Distributed Systems (ICPADS), pp. 381-388, 2018.
- 4. <u>P. H. Ha</u>, P. Tsigas, O. J. Anshus. Wait-free Programming for General Purpose Computations on Graphics Processors. IEEE Transactions on Computers (TC), 66(8): 1407-1420, 2017.
- 5. P. Kumar, A. Braeken, A. Gurtov, J. linatti, <u>P. H. Ha</u>. Anonymous Secure Framework in Connected Smart Home Environments. IEEE Transactions on Information Forensics & Security, 12 (4): 968-979, 2017.
- V. Tran, P. H. Ha. ICE: A General and Validated Energy Complexity Model for Multithreaded Algorithms. Proc. of the 22nd IEEE Intl. Conf. on Parallel and Distributed Systems (ICPADS), pp. 1041-1048, 2016.
- 7. V. Tran, B. Barry, <u>P. H. Ha</u>. Power Models Supporting Energy-efficient Co-design on Ultra-low Power Embedded Systems. Proc. of IEEE Intl. Conf. on Embedded Computer Systems: Architectures, Modeling, and Simulation (SAMOS XVI), pp. 39-46, 2016.
- 8. <u>P. H. Ha</u>, P. Tsigas, O. J. Anshus. The Synchronization Power of Coalesced Memory Accesses. IEEE Transactions on Parallel and Distributed Systems (TPDS), 21(7): 939-953, 2010.
- 9. P. Damaschke, <u>P. H. Ha</u>, P. Tsigas. Online Search with Time-Varying Price Bounds. Algorithmica, 55(4) 619-642, 2009.
- 10. <u>P. H. Ha</u>, P. Tsigas, M. Wattenhofer, R. Wattenhofer. Efficient Multi-Word Locking Using Randomization. Proc. of the ACM Symp. on Principles of Distributed Computing (PODC), pp. 249-257, 2005.

SELECTED PRESENTATIONS

2018	Department of Electrical Engineering, Chalmers University of Technology, Sweden
2018	FRIPRO seminar for Young Research Talents, Research Council of Norway, Oslo, Norway
2017	HiPEAC Workshop on Novel Exascale Systems / Rack-Scale Memory Systems and Models
	(NovExS-RAMbO), Stockholm, Sweden
2017	Workshop on UPC/UPC++ for Parallel Programming and Computing, Oslo, Norway
2014	Energy-Efficient Computing Systems research initiative (EECS), Norwegian University of
	Science and Technology (NTNU), Trondheim, Norway
2014	Department of Computer Science, Rutgers University, USA

FELLOWSHIPS, AWARDS, AND PRIZES

2014	FRIPRO Young Research Talents research grant from The Research Council of Norway, 2014
	- 2019 (The only grant in Information and Communication Technologies awarded by the
	FRIPRO Young Research Talents Programme 2014). Success rate 7%, all disciplines.
2013	Best paper award in the 6th IEEE International Conference on Human System Interaction
	(HSI).
2005	Student research grant for excellent research performance from The Royal Swedish Academy
	of Sciences, Sweden
2005	Student research grant for excellent research performance from Chalmers Research

Student research grant for excellent research performance from Chalmers Research Foundation, Sweden

2004 Invited paper for a special issue of selected papers from the 12th IEEE/ACM International Conference on Parallel Architectures and Compilation Techniques (PACT).