Priv.-Doz. Dr. Hong-Linh Truong

PERSONAL DATA

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Language	Vietnamese, English, German

EMPLOYMENT

May 2013 -	Assistant Professor, Distributed Systems Group, TU Wien, Austria
Mar 2007 – Apr 2013	Senior Researcher, Distributed Systems Group, TU Wien, Austria
Mar 2005 - Feb 2007	Post-doctoral researcher, Distributed and Parallel Systems, University of Innsbruck, Austria
Nov 2000 - Feb 2005	Researcher, Software Science group, Institute for Scientific Computing, University of Vienna, Austria
1998 - Nov 2000	Assistant Lecturer/Researcher, Faculty of Computer Science and Engineering, HoChiMinh City University of Technology, Vietnam Systems & Networks Consultant, HoChiMinh City University of Technology, Vietnam

EDUCATION

2013	Habilitation (Venia Docendi), Practical Computer Science, TU Wien, Austria
2005	Dr.techn./PhD, Computer Science, Vienna University of Technology (TU Wien), Austria
1998	Engineer, Computer Science and Engineering, HoChiMinh City University of Technology, Vietnam

RESEARCH AND TEACHING ACTIVITIES

Main Research Focus: My research interests are various fields pertained to distributed systems and distributed computing with a systems-oriented focus. My main research interest focuses *Software, Data and Service Engineering Analytics* by obtaining an understanding of the behavior and quality of distributed and parallel applications and systems through monitoring and analysis. My research has been applied to: Monitoring, Analysis and Optimization Techniques for Programs, Data and Systems; Parallel, Grid and Cloud Computing, and IoT; Data Service Models and Analytics; Socio-technical Services Engineering; and Elastic Computing. Furthermore, I am interested in (free) ICT solutions for (under) developing countries.

Research citations: Total citations: **3280**, h-index: **28**, i10-index: **77** (Google scholar on 25.08.2016)
Research team and prototype: http://rdsea.github.io
PhD student (co)advising: **2** current PhD students (co/supervisor).
Completed PhD students: **5** (co-supervisor) and **1** unofficial co-supervisor
Completed master students: **2** (supervisor) and **4** (co-supervisor)

Research Visit: University Stuttgart (2010) and University of Chicago/Argonne National Laboratory (2016)

Main teaching courses: Advanced Services Engineering, Distributed Systems, Distributed Systems Technologies, and Advanced Topics in Service-Oriented Computing and Cloud Computing, at Bachelor, Master and PhD levels.

SELECTED INVITED TALKS/TUTORIALS

- "On Service Engineering Analytics for IoT Clouds - Techniques and New Directions", The 2016 International Symposium on IoT Systems, Services and Analytics for Developing Worlds (ISSA-DW2016), Hanoi University of Science and Technology, Hanoi, Vietnam, 4 Aug 2016
- "Challenges and Techniques for Engineering Analytics of Elastic IoT Cloud Systems", College of Computer Science and Software Engineering, Shenzhen University, Mar 9, 2016
- "Principles for Engineering Elastic IoT Cloud Systems", 9th Symposium and Summer School On Service-Oriented Computing, June 28 – July 3, 2015, Crete, Greece
- "Elastic Computing - Towards Integration of IoT, People, and Clouds", IBM Almaden Research Center, March 31, 2015, San Jose, CA, USA
- "Programming Elasticity in the Cloud", The 6th International Conference on Cloud Computing Technology and Science, December 2014, Singapore
- "On the Integration of Software Services, People and Things for Elasticity Analytics", IBM Research Tokyo, Nov 2014.
- `"On Assuring Quality of Results in Hybrid Compute Units in the Cloud" , Dagstuhl Cloud-based Software Crowdsourcing, 2 September 2013, Germany
- `"Cloud Computing and Big Data Analytics for Sustainability Governance of Smart Cities" , 3rd Annual Cloud and Smart Data Summit 2013, 16-17 September 2013, Vienna, Austria

MOST IMPORTANT SCIENTIFIC AWARDS AND HONORS

- Best paper award, 13th IEEE International Conference on Services Computing (SCC 2016), June 26 - July 2, 2016, San Francisco, USA
- Best student paper award, 1st IEEE International Conference on Collaboration and Internet Computing, October 28 - October 30, 2015, Hangzhou, China
- Best paper award, 12th International Conference on Service Oriented Computing (ICSOC 2014), November 3-6, 2014, Paris, France
- Outstanding Paper Award 2013, International Journal of Web Information Systems, Emerald
- Best paper award, 10th International Conference on Service Oriented Computing (ICSOC 2012), November 12-16, 2012, Shanghai, China
- Best paper award, 24th International Conference on Advanced Information Systems Engineering (CAiSE~12), 25-29, June, 2012, Gdansk, Poland.
- Best paper award, The 5th European Conference on Smart Sensing and Context (EuroSSC), 14 - 16 November 2010, Passau, Germany.

MOST IMPORTANT RESEARCH PROJECTS

In overall, as a (co)principal investigator, I have contributed to the acquisition of ca. ***€ 2.3M*** *funding for TU Wien (from a total value in exceed of* ***€ 27.5M*** *funding for the involved projects). I have extensive experiences working with industries through several Austrian, European Commission and European Space Agency funded projects and other types of collaborations.*

- Principal Investigator, AlPS - Analytics, Privacy, and Security for IoT and Big Data, partially funded by ASIA-UNINET, 2016
- Principal Investigator, HAIVAN: Strengthening Critical IoT Software Development and Training in Highly Volatile and Unreliable Environments, partially funded by ASIA-UNINET, 2016.

- Principal Investigator, U-Test Testing Cyber-Physical Systems under Uncertainty: Systematic, Extensible, and Configurable Model-based and Search-based Testing Methodologies, H2020 project
- Co-Principal Investigator, Smart Society – Hybrid and Diversity-Aware Collective Adaptive Systems: When People Meet Machines to Build a Smarter Society, EU FET-IP
- Co-Principal Investigator, CELAR: Automatic, multi-grained elasticity-provisioning for the Cloud, EU FP7 STREP
- Co-Principal Investigator, Pacific Control Cloud Computing Lab (pc3l.infosys.tuwien.ac.at), 2011-2014

MOST IMPORTANT PROFESSIONAL SERVICES

- Program co-chair, 9th International Conference Service Oriented Computing and Applications (SOCA 2016), Nov 4-6 2017 , Macau, China
- PhD Doctoral Symposium Co-chair, The 8 IEEE International Conference on Service Oriented Computing and Applications (SOCA 2015)
- Program vice chair, 7th International Conference Service Oriented Computing and Applications (SOCA 2014), Nov 17-19 2014, Matsue, Japan
- Panel co-chair, International Conference on Service-oriented Computing (ICSOC 2014), Nov 3-6 2014, Paris, France
- Vice chair, Topic 2: Performance Prediction and Evaluation, Euro-Par 2009

SELECTED RECENT PUBLICATIONS

*I have published **ca. 180** journals and conferences papers**.** The full list of publications is available at http://dsg.tuwien.ac.at/staff/truong/publications*

- Hong-Linh Truong, Georgiana Copil, Schahram Dustdar, Duc-Hung Le, Daniel Moldovan, Stefan Nastic, “On Engineering Analytics for Elastic IoT Cloud Platforms”, The 14th International Conference on Service-Oriented Computing (ICSOC 2016), October 10-13, 2016, Banff, Alberta, Canada
- Georgiana Copil, Daniel Moldovan, Hong-Linh Truong, Schahram Dustdar, rSYBL: a Framework for Specifying and Controlling Cloud Services Elasticity, ACM Transactions On Internet Technology (TOIT), 2016.
- Tien-Dung Cao, Tran-Vu Pham, Quang-Hieu Vu, Hong-Linh Truong, Duc-Hung Le, Schahram Dustdar, "MARSA: A Marketplace for Realtime Human-Sensing Data”, Transactions on Internet Technology, 2016.
- Hong Linh Truong, Schahram Dustdar: Principles for Engineering IoT Cloud Systems. IEEE Cloud Computing 2(2): 68-76 (2015)
- Daniel Moldovan, Georgiana Copil, Hong-Linh Truong, Schahram Dustdar, "MELA: Elasticity Analytics for Cloud Services", International Journal of Big Data Intelligence, 2015, Vol. 2, No. 1
- Georgiana Copil, Demetris Trihinas, Hong Linh Truong, Daniel Moldovan, George Pallis, Schahram Dustdar, Marios D. Dikaiakos: ADVISE - A Framework for Evaluating Cloud Service Elasticity Behavior. ICSOC 2014: 275-290
- Hong Linh Truong, Schahram Dustdar: Principles of Software-Defined Elastic Systems for Big Data Analytics. IC2E 2014: 562-567
- Hong Linh Truong, Schahram Dustdar, Kamal Bhattacharya: Conceptualizing and Programming Hybrid Services in the Cloud. Int. J. Cooperative Inf. Syst. 22(4) (2013)