Son Dinh

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EDUCATION	**Washington University in Saint Louis**, Saint Louis, Missouri, USA

- Ph.D. in Computer Science — Aug 2013 – Jan 2020
  - Advisors: Prof. Christopher Gill, Prof. Kunal Agrawal.
  - Dissertation: Toward Efficient Scheduling for Parallel Real-Time Tasks on Multiprocessors.

Hanoi University of Science and Technology (HUST), Hanoi, Vietnam

- B.E. in Electronics and Telecommunications — Sep 2004 – May 2009
  - Advisor: Prof. Thanh Huu Nguyen.

CONTINUING EDUCATION

Machine Learning, Stanford University, Coursera — Jun 2019
- Supervised learning, unsupervised learning, neural network, and best practices for machine learning projects.

Algorithms II, Princeton University, Coursera — Jan 2019
- Graph algorithms, data structures and algorithms for string sorting and substring searching.

RESEARCH EXPERIENCE

Washington University in Saint Louis,
Department of Computer Science and Engineering

- Graduate Research Assistant — Aug 2013 – Present
  - Topic: Analysis and Design of Real-Time Scheduling Algorithms and Resource Sharing Protocols for Parallel Tasks.
  - Supervisors: Prof. Christopher Gill and Prof. Kunal Agrawal.

Hanoi University of Science and Technology,
School of Electronics and Telecommunications

- Research Assistant — Nov 2011 – Dec 2012
  - Project: Reducing Energy Consumption in Data Center Networks based on Traffic Engineering (ECODANE), a joint project between HUST and Wuerzburg University, Germany.
  - Supervisors: Prof. Thanh Huu Nguyen, Assoc. Prof. Huong Thu Truong.
- Undergraduate Research Assistant — 2008 – 2009
  - Project: German – Vietnamese Next Generation Network Services Research and Development Testbed (GVNext), a joint project between HUST and Fraunhofer FOKUS Berlin, Germany.
  - Supervisor: Prof. Thanh Huu Nguyen.

PUBLICATIONS

JOURNALS

[1] **S. Dinh**, J. Li, K. Agrawal, C. Gill, and C. Lu, "Blocking Analysis for Spin Locks in Real-Time Parallel Tasks", *IEEE Transactions on Parallel and Distributed Systems*, vol. 29, no. 4, Apr 2018.

CONFERENCES

[1] **S. Dinh**, C. Gill, and K. Agrawal, "Efficient Deterministic Federated Scheduling for Parallel Real-Time Tasks", in *Proceedings of 26th IEEE International Conference on Embedded and Real-Time Computing Systems and Applications*, South Korea, Aug 2020 (*Best paper candidate*).

[2] **S. Dinh**, C. Gill, and K. Agrawal, "Analysis of Global Fixed-Priority Scheduling for Generalized Sporadic DAG Tasks", arXiv:1905.05119 [cs.DC], 2019.

[3] J. Li, **S. Dinh**, K. Kieselbach, K. Agrawal, C. Gill, and C. Lu, "Randomized Work Stealing for Large Scale Soft Real-Time Systems", in *Proceedings of 37th IEEE Real-Time Systems Symposium*, Porto, Portugal, Dec 2016.

TEACHING EXPERIENCE

CSE 522S: Advanced Operating Systems,
Washington University in Saint Louis

- Teaching Assistant — Spring 2018
  - Role: Contributed to the course material, including labs and studios. Held office hours and helped students with the course content.

- Instructor: Prof. Christopher Gill.

AWARDS & SCHOLARSHIPS		
	▪ Vietnam Education Foundation Fellowship Alternate	2013
	Alternate for receiving financial support for graduate study in the U.S.	
	▪ Vietnam's Ministry of Education and Training Scholarship	2004 – 2009
	For attaining very good academic performance.	
	▪ Third Place in Hanoi's Chemistry Olympiad	2002
	Organized by Hanoi province for high school students excellent in chemistry.	

PROFESSIONAL SERVICES

Reviewer: ACM Transactions on Parallel Computing (TOPC), IEEE Transactions on Parallel and Distributed Systems (TPDS), IEEE Real-Time and Embedded Technology and Applications Symposium (RTAS)

INDUSTRY EXPERIENCE

Object Computing Inc., Saint Louis, Missouri

▪ Software Engineer   Feb 2020 – Present
- Projects: (i) Developing OpenDDS, an open-source middleware for real-time distributed data communications conforming to the Object Management Group Data Distribution Service standard (OMG DDS). (ii) Integrating OpenDDS with the Robot Operating System 2 (ROS 2) through ROS middleware interface.

Wala Jsc., Hanoi, Vietnam

▪ Software Engineer   Aug 2012 – Apr 2013
- Project: Developed and maintained backend system for a mobile social media application, which allows users to call, send instant messages, connect and share photos.

VNG Corp., Hanoi, Vietnam

▪ R&D Engineer   Aug 2011 – Mar 2012
- Project: Improved performance of a distributed key-value storage for a Vietnamese online social network, named Zing Me.

Xener Systems Inc., Hanoi, Vietnam

▪ R&D Engineer   Jul 2009 – Feb 2011
- Project: Developed application servers for IP Multimedia Subsystem, a core subsystem of the Third Generation (3G) cellular network. Worked with various multimedia Internet protocols, including Session Initiation Protocol and Session Description Protocol.

LANGUAGES

- ▪ English: Professional working proficiency.
- ▪ Vietnamese: Native language.

SKILLS

- ▪ Programming Languages: C/C++, Java, Python, MATLAB.
- ▪ Platforms & Tools: GNU/Linux, macOS, OpenMP, Intel CilkPlus, Shell, LaTeX.
- ▪ Computer Networking: TCP/IP, Session Initiation Protocol (SIP), Software-Defined Networking (SDN).

CERTIFICATE

▪ Cisco Certified Network Associate, version 3.1   2009

REFERENCES

▪ **Prof. Christopher Gill**
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1 Brookings Drive, St. Louis, Missouri 63130, USA
E-mail: cdgill@wustl.edu

▪ **Assoc. Prof. Kunal Agrawal**
Associate Professor of Computer Science and Engineering
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1 Brookings Drive, St. Louis, Missouri 63130, USA
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[*CV compiled on 2020-10-20*]