

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”, to appear in *Proceedings of 26th IEEE International Conference on Embedded and Real-Time Computing Systems and Applications*, South Korea, Aug 2020.
- [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
 - Project: Developing OpenDDS, an open-source middleware for real-time distributed data communications that conforms to the Object Management Group Data Distribution Service standard (OMG DDS). Developing library for integrating OpenDDS with Robot Operating System (ROS).

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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- **Assoc. Prof. Kunal Agrawal**
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