

# Son Dinh

12140 Woodcrest Executive Dr., Ste 300, St. Louis, MO 63141

✉ sonndinh@wustl.edu • ☎ +1 (314) 585-9358 • 🌐 <https://sonndinh.github.io> • 📺 sonndinh • 📶 sonndinh

## 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 26<sup>th</sup> 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 37<sup>th</sup> 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**  
Professor of Computer Science and Engineering  
Washington University in Saint Louis  
1 Brookings Drive, St. Louis, Missouri 63130, USA  
E-mail: cdgill@wustl.edu
- **Assoc. Prof. Kunal Agrawal**  
Associate Professor of Computer Science and Engineering  
Washington University in Saint Louis  
1 Brookings Drive, St. Louis, Missouri 63130, USA  
E-mail: kunal@wustl.edu

[CV compiled on 2020-08-23]