# Tran Duc Muoi
A.K.A MUOI TRAN — PH.D. CANDIDATE

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## Research Interests

Network security; blockchain security and privacy

## Education

**School of Computing, National University of Singapore**                                                            *Singapore*

PH.D. IN COMPUTER SCIENCE                                                                                              *08/2016 –*

- Advisor: Dr. Min Suk Kang, Assistant Professor

**University of Engineering and Technology, Vietnam National University**                               *Hanoi, Vietnam*

B.S. IN COMPUTER SCIENCE                                                                                          *08/2011 – 07/2015*

- CAP: 3.49/4.0, Honor Programme, Highest Distinction.
- Thesis: "Some Improvements for Regular Expression Solving in Z3-Regex"
- Thesis advisor: Associate Professor Hoang Truong

## Employment

**IBM Blockchain Research, IBM Studio**                                                                            *Singapore*

INTERN RESEARCHER                                                                                              *05/2018 – 08/2018*

- Supervisor: Dr. Pralhad Deshpande

**School of Computing, National University of Singapore**                                                            *Singapore*

RESEARCH ASSISTANT                                                                                           *01/2016 – 07/2016*

- Supervisor: Associate Professor Chin Wei Ngan

**School of Computing, National University of Singapore**                                                            *Singapore*

INTERN RESEARCHER                                                                                            *07/2015 – 01/2016*

- Supervisor: Associate Professor Chin Wei Ngan

## Honors & Awards

| | | |
|---|---|---|
| 2019 | **Awarded,** President's Graduate Fellowship (2019 – 2020 academic year) | *Singapore* |
| 2018 | **Awarded,** I&E Practicum@SoC (10,000 SGD grant) | *Singapore* |
| 2016 | **Awarded,** NUS Research Scholarship (Renewable up to 4 years) | *Singapore* |
| 2015 | **Awarded,** Honda Y-E-S Award Vietnam (Awarded by Honda Foundation to the best 10 students) | *Vietnam* |
| 2015 | **Awarded,** Best thesis defense, VNU University of Engineering and Technology | *Vietnam* |
| 2015 | **1st Prize,** Student Scientific Research Contest, VNU University of Engineering and Technology | *Vietnam* |
| 2012 | **Awarded,** GE Foundation Scholar Leadership (Awarded by GE Foundation to the best 10 students) | *Vietnam* |

## Publications

**Practical Verifiable In-network Filtering for DDoS defense**                                                 *Dallas, TX, USA*

DELI GONG(*), MUOI TRAN(*), SHWETA SHINDE, HAO JIN, VYAS SEKAR, PRATEEK SAXENA, MIN SUK KANG                        *07/2019*

- (*) Lead authors alphabetically ordered
- In Proceedings of IEEE International Conference on Distributed Computing Systems (**IEEE ICDCS**)
- Acceptance rate: 19.6%

**On the Feasibility of Rerouting-based DDoS Defenses** *San Francisco, CA, USA*

Muoi Tran, Min Suk Kang, Hsu-Chun Hsiao, Wei-Hsuan Chiang, Shu-Po Tung, Yu-Su Wang *05/2019*

- In Proceedings of IEEE Symposium on Security and Privacy (**IEEE S&P**)
- Acceptance rate: 11.7% (84 out of 720)

**Obscuro: A Bitcoin Mixer using Trusted Execution Environments** *San Juan, PR, USA*

Muoi Tran, Loi Luu, Min Suk Kang, Iddo Bentov, Prateek Saxena *12/2018*

- In Proceedings of Annual Computer Security Applications Conference (**ACSAC**)
- Acceptance rate: 20.1% (60 out of 299)

## Teaching

**School of Computing, National University of Singapore** *Singapore*

Teaching Assistant

- CS5231 — System Security (Sem1 2017/18)
- CS5321 — Network Security (Sem2 2016/17)
- CS2106 — Introduction to operating systems (Sem2 2016/17)
- CS2104 — Programming language concepts (Sem1 2016/17)

## Professional Service

Conference external reviewer

- 18th World Conference on Information Security Applications (WISA '17')
- 18th International Conference on Verification, Model Checking, and Abstract Interpretation (VMCAI '17)
- Proceeding of Object-oriented Programming, Systems, Languages, and Applications (OOPSLA '16)

## References

**Dr. Min Suk Kang (advisor)**

Assistant Professor

- School of Computing, National University of Singapore
- Email: kangms@comp.nus.edu.sg

**Dr. Prateek Saxena (collaborator)**

Assistant Professor

- School of Computing, National University of Singapore
- Email: prateeks@comp.nus.edu.sg