

BUI PHI DIEP

Ph.D Student, Uppsala University

BASIC INFORMATION

Full name : Bui Phi Diep
Office Address : Box 337, SE-751 05 Uppsala, Sweden
Phone : (+46)72 2505 696
Email : bui.phi-diep@it.uu.se
Website : diepbp.github.io

RESEARCH INTEREST

- Constraint Solving
- Security and Privacy
- Automated Program Verification
- Program Analysis

PUBLICATIONS

- **Trau: SMT Solver for String Constraints** -
Parosh Aziz Abdulla, Mohamed Faouzi Atig, Yu-Fang Chen, Bui Phi Diep, Lukáš Holík, Ahmed Rezine and Philipp Rümmer. FMCAD 2018.
- **Flatten and Conquer: A Framework for Efficient Analysis of String Constraints** -
Parosh Aziz Abdulla, Mohamed Faouzi Atig, Yu-Fang Chen, Bui Phi Diep, Lukáš Holík, Ahmed Rezine and Philipp Rümmer. PLDI 2017.
- **Counter-Example Guided Program Verification** -
Parosh Aziz Abdulla, Mohamed Faouzi Atig, and Bui Phi Diep. FM 2016.

EDUCATION

- **Uppsala University, Sweden** *2015 - present*
Ph.D in Computer Science
Advisor: Mohamed Faouzi Atig and Parosh Aziz Abdulla
- **University of Engineering and Technology, VNU Hanoi** *2007 - 2014*
B.Sc and M.Sc in Computer Science
Advisor: Mohamed Faouzi Atig and Nguyen Viet Ha
Master thesis: Avoiding State-Space Explosion in Model-Checker

RESEARCH EXPERIENCE / TOOLS

- **Efficient Solver for String Equations** *2016 - present*
Developing an open-source string solver **Trau**, targeting to grammar and transducer constraints. Trau uses Microsoft SMT Z3 solver as the external solver.
- **Verification of Concurrent Programs** *2015 - present*
Developing a model checker **CEGPV** to verify concurrent C/C++ programs.

WORKING EXPERIENCE

- **Department of Information Technology, Uppsala University, Sweden** *2015 - present*
Teaching Assistant

- **Microsoft Research, Bangalore, India**

July 2018 - October 2018

PhD Intern

Mentor: Akash Lal

- **National Institute of Informatics (NII), Tokyo, Japan**

March 2013 - August 2013

Master Intern

Mentor: Ryuichi Takahashi

TEACHING

- Teaching Assistant of Programming Theory: Fall 2016, Fall 2017.
- Teaching Assistant of Operating Systems and Process-Oriented Programming: Spring 2016, Spring 2017.

PROGRAMMING LANGUAGES

C/C++/C# (expert), Java (proficient), Python (prior experience)

SERVICES

- Artifact Evaluation Committee of TACAS'19.
- External Reviewer of CAV'18.
- External Reviewer of TACAS'17.

REFERENCES

- **Assoc. Prof. Mohamed Faouzi Atig**
Department of Information Technology, Uppsala University, Sweden
Email: mohamed_faouzi.atig@it.uu.se
Website: <http://www.it.uu.se/katalog/mohat117>
- **Prof. Parosh Aziz Abdulla**
Department of Information Technology, Uppsala University, Sweden
Email: parosh.abdulla@it.uu.se
Website: <http://user.it.uu.se/~parosh/>
- **Assoc. Prof., Nguyen Viet Ha**
Faculty of Information Technology, University of Engineering and Technology, VNU Hanoi, Vietnam
Email: hanv@vnu.edu.vn
Website: <http://uet.vnu.edu.vn/~hanv>