

Résumé

Hoang Gia NGUYEN

Date of Birth: 22/09/1990

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Citizenship: Vietnamese



Education

2015
2018

PhD of Software Engineering, *LIPN Laboratory*, Paris 13 University, Villetaneuse, France.

2012
2014

Master of Software Engineering, *Bordeaux University*, French Universities Program – Vietnam National University, Ho Chi Minh City, Vietnam.

2008
2012

Bachelor of Software Engineering, *Hoa Sen University*, Ho Chi Minh City, Vietnam.

2005
2008

Gifted student of mathematics, physics and chemistry, *Nguyen Chi Thanh High School*, Ho Chi Minh City, Vietnam.

PhD thesis

Title *Efficient Parametric Verification of Parametric Timed Automata*

Supervisors Assoc. Prof. Étienne ANDRÉ and Prof. Laure PETRUCCI

Achievements

- **2014:** 1st class student in 2nd year of master (M2) with GPA: 15.6.
Thesis: *Efficient Parametric Verification of Real-Time Systems* - Nominated for best thesis.
- **2013:** 2nd class student 1st year of master (M1) with GPA: 14.4.

Publications

- Étienne André, Hoang Gia Nguyen and Laure Petrucci. **Distributed non-Zenoness parametric model checking (journal)**. Will be submitted soon.
- Hoang Gia Nguyen, Laure Petrucci, and Jaco van de Pol. **Layered and Collecting NDFS with Subsumption for Parametric Timed Automata**. 23rd International Conference on Engineering of Complex Computer Systems, IEEE CPS ICECCS 2018.
- Étienne André, Hoang Gia Nguyen and Laure Petrucci. **Efficient parameter synthesis using optimized state exploration strategies**. 22nd International Conference on Engineering of Complex Computer Systems, IEEE CPS ICECCS 2017.

- Étienne André, Hoang Gia Nguyen, Laure Petrucci and Sun Jun. **Parametric model checking timed automata under non-Zenoness assumption**. 9th NASA Formal Methods Symposium NFM 2017.
- Étienne André, Giuseppe Lipari, Hoang Gia Nguyen and Youcheng Sun. **Reachability Preservation Based Parameter Synthesis for Timed Automata**. 7th NASA Formal Methods Symposium NFM 2015.
- Étienne André, Camille Coti, Hoang Gia Nguyen, **Enhanced Distributed Behavioral Cartography of Parametric Timed Automata**, 17th International Conference on Formal Engineering Methods ICFEM 2015.

Software Development

- **IMITATOR - Parameter Synthesis for Real-Time Systems**
<https://www.imitator.fr>

Selected Talks

- **Efficient Parameter Synthesis Using Optimized State Exploration Strategies**, 22nd International Conference on Engineering of Complex Computer Systems - ICECCS 2017, Fukuoka, Japan.
- **Parametric Model Checking Timed Automata Under non-Zenoness Assumption**, 9th NASA Formal Methods Symposium - NFM 2017, California, USA.
- **Enhanced Distributed Behavioral Cartography of Parametric Timed Automata**, SynCoP 2015, April 2015, London, UK.

Skills

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|--------------------------------|---|
| Formal Methods | Model Checking, Theorem Proving, Parametric Timed Automata, Temporal Logic, Petri Nets, Event-B. |
| Model Checker | Altarica-Studio, Rodin IDE, IMITATOR, SPIN, PAT, Upaal. |
| Parallel Programming | MPI, OpenMP, Ocaml/MPI. |
| Languages | C, C++, C#, Java, Ocaml, python, T-SQL, PL/SQL, Prolog, HTML, XML, JavaScript/AJAX, CSS, batch, shell. |
| Databases | Oracle Database, MS SQL, ODBMS, MySQL. |
| Tools | Microsoft Visual Studio, Eclipse IDE, NetBean IDE, Borland C++, Code::Block, SVN, Git, Maven. |
| OOAD/OOP & Tools | Object Oriented Analysis (OOA), Object Oriented Design (OOD), Object Oriented Programming (OOP), Unified Modeling Language (UML), IBM Rational Rose, Sparx, Visual Paradigm, Enterprise Architect, ArgoUML. |
| Framework & Library | .NET, BACKBONE. |
| Servers | Apache Tomcat, Jetty, Glassfish, IIS. |
| Web Service | Restful, SOAP Web services. |

Other skills Design Pattern, LaTeX, Word, Excel, Power Point, Viso.

Experience

Teaching

2015
2017

Tutor, IUT-Paris 13 University.

Courses: Application for Network and Telecommunication, Database Foundation, Networking Foundation.

Vocational

2014
2015

Intern, LIPN Laboratory - Paris 13 University, Paris - France.

2014
2015

Member, SAVE - Laboratory of Systems Analysis and VERification, Ho Chi Minh City - Vietnam.

2010
2012

E-Commerce System Developer and Administrator, Hoang Cuong Electronic, Ho Chi Minh City - Vietnam.

References

LIPN Laboratory - Paris 13 University

o Étienne ANDRÉ

Associate Professor, LIPN Laboratory, Villetaneuse - France

✉ Etienne.Andre@univ-paris13.fr

o Laure PETRUCCI

Professor, Director of LIPN Laboratory, Villetaneuse - France

✉ Laure.Petrucci@lipn.univ-paris13.fr

LaBRI Laboratory - Bordeaux University

o Anne DICKY

Associate Professor, LaBRI Laboratory, Bordeaux - France

✉ Anne.Dicky@labri.fr

SAVE Laboratory - University of Technology

o Thanh Tho QUAN

Associate Professor, Head of Department of Software Engineering, University of Technology, Ho Chi Minh - Vietnam

✉ QTTho@cse.hcmut.edu.vn

Languages

Vietnamese **Native**
English **Daily practice**
French **Intermediate**

Mother Tongue
All work performed in English
Learning since 2015

Interests

- Research Model Checking and Verification, Distributed Computing, Artificial Intelligence, Big Data and Data Mining.
- Leisure Exploring new Technologies, Reading Books, Photography, Swimming, Hiking, Watching Movies.