

HOANG GIA NGUYEN

Researcher & Senior Software Developer

✉ hoangia90@email.com ☎ 07 68 64 62 62
🌐 <https://lipn.univ-paris13.fr/~hoanggia.nguyen/>

✉ Appartement 22, 3 allée Léon Blum, 59260, Hellemmes, Lille, France 📍 Lille, France
in <https://www.linkedin.com/in/hoang-gia-nguyen/> 🌐 <https://github.com/hoangia90>

EXPERIENCE

Researcher - Post-doctorate

INRIA

📅 Nov 2018 – Ongoing 📍 Lille, France

- Research Project : Design of Correct-by-Construction Self-Adaptive Cloud Applications Using Formal Methods
- Responsibilities : Researcher, Java Full-stack Developer & Devops
Developing and Deploying JavaBIP platform on clouds : Designing and developing the formal models of micro-services while assuring the coordination in multi-cloud environment (GCP, AWS, Azure, Heroku, etc.); Developing some mechanisms for multi-cloud micro-services systems such as auto deployment, backup, monitoring etc.

Ph.D. & Internship

Université Sorbonne Paris Nord

📅 2014 – 2015 – 2018 📍 Villetaneuse, France

- Research Project : Efficient Parametric Verification of Parametric Timed Automata
- Responsibilities : Researcher, OCaml & MPI Developer
Developing IMITATOR platform: Proposing, designing, optimizing and implementing parameter synthesis algorithms and its distributed version running on networks of supercomputer.

Teaching

Université Sorbonne Paris Nord & Freelance

📅 2015 – 2018 📍 Villetaneuse, France

- Courses : Telecommunication and Network Application Programming (Java), Database Systems (Postgre), Networking Foundation
- Courses (Freelance) : Machine Learning, Natural Language Processing (Python, Java, classification, clustering, .etc)

Member

SAVE Lab - University of Technology of Ho Chi Minh City

📅 2014 – 2015 📍 Ho Chi Minh, Vietnam

- Responsibility : Researcher
Working with SAVE research team in formal methods and AI directions

Developer - Part-time

Hoang Cuong Electronic

📅 2010 – 2012 📍 Ho Chi Minh, Vietnam

- Responsibility: Developer (C#, Microsoft SQL, Magento CMS)
Developing a Part of the ERP System of the Company

MY LIFE PHILOSOPHIES

*"Less is more &
Practice makes perfect"*

SKILLS

Responsible Dynamic Curious

Fast Learner

Java Fullstack Ocaml Python

C C++ C# ODBMS

SQL (Oracle, MySQL, Postgre, etc.)

JavaScript Shell Batch AJAX

Prolog HTML CSS XML

ASP.NET Hibernate

Object-Oriented Analysis And Design

object-Oriented Programming UML

Formal Methods B-Method

Temporal Logic Petri Nets

Parametric Timed Automata

Model Checking & Theorem Proving

Altarica-Studio Rodin IDE PAT

IMITATOR SPIN Upaal

MPI/OpenMP akka

Git SVN

Telecommunication & Networking

LANGUAGES

English ● ● ● ● ● ● ● ●

French ● ● ● ● ● ● ● ●

Vietnamese ● ● ● ● ● ● ● ●

SOFTWARE

IMITATOR

Parameter Synthesis for Real-Time Systems

- <https://www.imitator.fr/>

JavaBIP

Coordination of concurrent Java components using a Java flavour of the BIP (Behaviour, Interactions, Priorities) framework

- <https://github.com/sbliudze>
- <https://github.com/hoangia90>

Other Projects

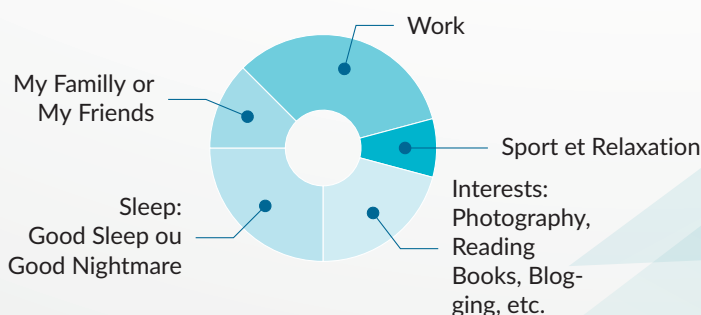
My new projects will be put on GitHub

- <https://github.com/hoangia90>

PUBLICATIONS

- Étienne André, Hoang Gia Nguyen et Laure Petrucci. **Distributed non-Zenoness parametric model checking** (article de revues internationales). Submitted.
- Hoang Gia Nguyen, Laure Petrucci, et 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 et 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 et 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 et Youcheng Sun. **Reachability Preservation Based Parameter Synthesis for Timed Automata**. 7th NASA Formal Methods Symposium NFM 2015
- Étienne André, Camille Coti et Hoang Gia Nguyen, **Enhanced Distributed Behavioral Cartography of Parametric Timed Automata**, 17th International Conference on Formal Engineering Methods ICFEM 2015
- For more publications : <https://lipn.univ-paris13.fr/~hoanggia.nguyen/>

A DAY OF MY LIFE



EDUCATION

Ph.D. of Computer Science

Université Sorbonne Paris Nord

📅 2015 – 2018

📍 LIPN Laboratoire

Master of Computer Science

Université de Bordeaux (Computer Science) & Université de Paris 6 (Telecommunication & Networking)

📅 2012 – 2014

📍 PUF

- M2 - 2nd year : 1st class student with GPA: 15.6 (Nominated for best thesis)
- M1 - 1st year : 2nd class student with GPA: 14.4

Bachelor of Software Engineering

Hoa Sen University

📅 2008 – 2012

📍 Ho Chi Minh, Vietnam

Gifted Student of Mathematics, Physics and Chemistry

Nguyen Chi Thanh High School

📅 2005 – 2008

📍 Ho Chi Minh, Vietnam

REFEREES

Senior Researcher Simon BLIUDZE

@ INRIA Laboratory

✉ Simon.Bliudze@inria.fr

Professor Étienne ANDRÉ

@ LIPN Laboratory - Université Sorbonne Paris Nord

✉ Etienne.Andre@univ-paris13.fr

Professor Laure PETRUCCI

@ LIPN Laboratory - Université Sorbonne Paris Nord

✉ Laure.Petrucci@lipn.univ-paris13.fr

Associate Professor Anne DICKY

@ LaBRI Laboratory - Université de Bordeaux

✉ Anne.Dicky@labri.fr

Associate Professor Thanh Tho QUAN

@ SAVE Laboratory - University of Technology of Ho Chi Minh City

✉ QTTho@cse.hcmut.edu.vn