

Huu-Phuc Vo

WORK ADDRESS

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HOME ADDRESS

Stamgatan, Stockholm

Born: January 26, 1985

PROGRAMMING LANGUAGES

- **C and C++**: Proficient. Low-level programming language; **Haskell**: Proficient. Pure functional programming language; **MiniZinc**: Proficient. Constraint programming language to model optimisation problems in a high-level, solver-independent way.
- **Python**: Intermediate; **Java**: Intermediate.
- **JavaScript**: Beginner; **Clojure**: Beginner; **Erlang**: Beginner.

GRANTS and AWARDS

- **Best paper award**, COORDINATION 2018, Madrid, Spain, June 2018
- **Honours Scholarship Grant** for the period October 2012 to March 2013, outlined by The Japan Student Services Organisation (JASSO), Japan, 2012.
- **Advanced Study Scholarship Grant** for the period October 2012 to October 2017, outlined by The National Institute of Informatics (NII), Tokyo, Japan, 2012.
- **Internship Scholarship grant** for the period January 2011 - October 2011, outlined by The National Institute of Informatics (NII), Tokyo, Japan.
- **Internship Scholarship grant** for the period December 2007 - May 2008, Software Engineer Laboratory, University of Science, Ho Chi Minh city, Vietnam.

WORK EXPERIENCE

- **November 2015 - Now**: Ph.D. student and Teaching assistant at Department of Information Uppsala University, Uppsala, Sweden.
 - **Project**: UpScale's vision is to provide programming language support to efficiently develop applications that seamlessly scale to the available parallelism of manycore chips without abandoning the object-oriented paradigm and the associated software engineering methodologies.
 - **Project**: SCADA: Scalable Data for Pervasive Parallelism. We develop programming language constructs for specifying aspects of the data distribution for a wide range of data

types, and compiler transformations for modifying programs operating on these data types to work with the given data distribution.

- **October 2014 - October 2015:** Lecturer at Department of Information Technology, University of Science, VNU, Ho Chi Minh city, Vietnam.
- **October 2012 - October 2014:** Ph.D. student at National Institute of Informatics, Tokyo, Japan.
 - **Project:** We aim to make self-adjusting lenses from pure lenses and propose an approach to maintain the consistency between original source and modified source. More general, we refer to this approach as self-adjusting bidirectional transformations and show that it is a practical and efficient approach.
 - **Project:** GRoundTram system is a powerful tool that was developed by BiG team of National Institute of Informatics, which is designed for building a bidirectional transformation between two models (graphs). The project tackles the challenging issue, which is to support the privacy contexts using GRoundTram system.
- **October 2011 - October 2012:** Lecturer at Department of Information Technology, University of Science, Vietnam National University, Ho Chi Minh city, Vietnam.
- **January 2011 - October 2011:** Internship at National Institute of Informatics, Tokyo, Japan.
 - **Project:** Program transformation and program calculation. The project used the functional programming language Haskell and OCaml to develop a library supporting bidirectional graph transformation.
 - **Duties:** In this project, my duties were to use Haskell or OCaml to implement a matching query algorithm for graph transformation algorithm, integrate the interface with the core engine using MySQL and XML, and develop an effective graphical interface module using Java.
- **June 2009 - January 2011:** Lecturer at Department of Information Technology, University of Science, Vietnam National University, Ho Chi Minh city, Vietnam.
- **December 2007 - May 2008:** part-time web developer at Software Engineer Laboratory (SELAB), Dept of IT, University of Science, VNU, HCMC, Vietnam.
 - **Project:** develop and maintain university website including faculties and departments websites, web content management system and blackboard system (DotNet Nuke), and learning management system (Moodle). The project aimed to develop more comprehensive functions that serve thousands of students, lecturers, and researchers.

- o **Duties:** I was responsible for developing grading function for learning management system (Moodle) using C# and .NET framework, and maintaining the lab websites using DotNet Nuke.
- **October 2006 - April 2007:** Full-time software and web developer at KnG, Ho Chi Minh city, Vietnam
 - o **Project:** the project aimed to develop an e-commerce website for Liquor Company in Japan based on the .NET framework. The work included developing the core engine, and web interface using C# and ASP.NET programming languages; MS SQL Server and MS Access databases; Active Directory, Dotnet Nuke frameworks; CSS3/HTML, Javascript, AJAX frontend scripting languages.
 - o **Duties:** I was responsible for developing the web interface and core engine. My tasks included designing, implementing (in C# and ASP.NET), integrating, testing, and documenting.
- **Mar 2005 - Sep 2005:** Start my own Tri-Huu Web Design company, Vietnam
 - o **Project:** there are hundreds thousand of shops, restaurants, and companies in Ho Chi Minh city that they do not have a website. To gain more practical experience, I decided start my own Web design company to offer comprehensive services such as web design, maintenance website and databases, and hosting services. Within 6 months, I accomplished 3 contracts with our customers. In August 2005, I terminated the web design company to focus on studying at the university.
 - o **Duties:** I was responsible for all roles in my startup company such as customer services, marketing, developing the web site, choosing technology, working with tax agency, preparing contract, ...

EDUCATION

- **Ph.D. in Computer Science, Uppsala University, Sweden, November 2015 - September 2020.** PhD student in Computer Science. Supervisor: Di Yuan. Title: Machine-Assisted Reformulation for MiniZinc.
- **Ph.D. in Computer Science, National Institute of Informatics, Tokyo, Japan. October 2012 - October 2014.** The Graduate University for Advanced Studies - SOKENDAI. PhD student in Computer Science. Supervisor: Zhenjiang Hu. Title: Towards self-adjusting bidirectional graph transformations.

- **M.Sc. in Computer Science, University of Science, Ho Chi Minh city, Viet Nam, October 2009 - October 2011.** Master student in Computer Science. Supervisor: Hanh-Nhi Tran. Title: Functional programming for bx transformations.
- **B.Sc. in Software Engineer and Information System, University of Science, Ho Chi Minh city, Viet Nam, October 2006 - May 2009.** Bachelor of Science in Computer System and Software Engineering. Title: Open source software workflow solution for managing documents. Supervisor: Hanh-Nhi Tran

PUBLICATIONS

1. Paper accepted. **Huu-Phuc Vo**, *Machine-Assisted Reformulation for MiniZinc*. The 16th IEEE International Conference on Autonomic Computing (ICAC), Umea, Sweden, 2019.
2. Paper accepted. **Huu-Phuc Vo**, *Towards Efficient Solvers for Optimisation Problems*. The 19 th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGRID 2019), Cyprus, 2019.
3. Paper accepted. **Huu-Phuc Vo**, *Towards Efficient Algorithms for Constraints Satisfaction Problems*. The European Joint Conferences on Theory and Practice of Software (ETAPS), Czech, 2019.
4. Fernandez-Reyes, Kiko, Dave Clarke, Elias Castegren, and **Huu-Phuc Vo**. *Forward to a Promising Future*. In *International Conference on Coordination Languages and Models*, pp. 162-180. Springer, Cham, 2018.
5. **Huu-Phuc Vo**, Anders Berglund and Mats Daniels. *A Perspective from Vietnamese Students on Teaching of Soft Skills*. International Conference on Learning and Teaching in Computing and Engineering (Latice), Hong Kong, 2017.