Curriculum Vitae

Personal information

Name:	Phuong Thanh NGUYEN
Gender:	Male
Family status:	Married, three children
email:	phuong.nguyen@univaq.it

Short biography

Dr. Phuong Thanh Nguyen is Associate Professor at the University of L'Aquila (Italy). He obtained a Ph.D. in Computer Science from the University of Jena (Germany). He has worked as a research and teaching assistant at various universities in Vietnam. In 2014, Phuong was a postdoctoral researcher at Politecnico di Bari (Italy), working with recommender systems, Semantic Web, and Linked Data. After that, from August 2017 to January 2022, Phuong held a position as a postdoctoral researcher at University of L'Aquila. From February 2022 to January 2025, he was a tenure track assistant professor at the same university.

His research interests include Machine Learning developments in Software Engineering and Model-Driven Engineering with applications in computer networks, semantic web, recommender systems, and classification/clustering of modeling repositories. Phuong has worked on different European projects including CROSSMINER, TYPHON, and MOSAICO, developing recommender systems to support software implementation and deployment.

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Education

12/2009 – 09/2012	Doctorate degree, Dr.-Ing. University of Jena (Germany)
09/2002 – 02/2005	Master of Information Technology Hanoi University of Science and Technology (Vietnam)
09/1997 – 05/2002	Diploma in Information Technology Hanoi University of Science and Technology (Vietnam)

Habilitation

In July 2023, I obtained the Italian habilitation (Abilitazione Scientifica Nazionale, ASN 2021 Quinto Quadrimestre) as Associate Professor for the following two independent sectors:

- Computer Science (01/B1: Informatica, II fascia).[1]
- Computer Engineering (09/H1: Sistemi di Elaborazione delle Informazioni, II fascia).[2]

Research interests

- **Mining Software Repositories**. Open-source software (OSS) forges, such as GitHub or Maven, offer many software projects that deliver stable and well-documented products. Most OSS forges typically sustain vibrant user and expert communities which in turn provide decent support, both for answering user questions and repairing reported software bugs. Moreover, OSS platforms are also an essential source of consultation for developers in their daily development tasks. Code reusing is an intrinsic feature of OSS, and developing new software by leveraging existing open source components allows one to considerably reduce their development effort. We have conceptualized techniques and tools [29],[35],[39],[79] to assist developers in their programming tasks.
- **Recommender Systems**. In online shopping platforms, recommender systems are considered to be an indispensable component, allowing business owners to offer personalized products to customers. The development of such systems has culminated in well-defined recommendation algorithms, which in turn prove their usefulness in other fields, such as entertainment industry [83],[84],[85], or employment-oriented service. Recommender systems in software engineering (RSSE) have been conceptualized on a comparable basis, i.e., they assist developers in navigating large information spaces and getting instant recommendations that are helpful to solve a particular development task. In this sense, RSSE provide developers with useful recommendations, which may consist of different items, such as code examples [20],[29],[74], topics [72],[79] third-party components [21],[41],[81], documentation [39], to name a few.
- **Machine Learning and Deep Learning**. The proliferation of disruptive Machine Learning (ML) and especially Deep Learning (DL) algorithms has enabled a plethora of applications across several domains. Such techniques work on the basis of complex artificial neural networks, which are capable of effectively learning from data by means of a large number of parameters distributed in different network layers. In this way, they are able to simulate humans' cognitive functions, aiming to acquire real-world knowledge autonomously. ML/DL techniques are an advanced paradigm that brings in substantial improvement in performance compared to conventional learning algorithms. We have successfully studied and deployed various Machine Learning techniques in Software Engineering and other domains [21],[22],[26],[36],[37],[40],[76].
- **Semantic Web and Linked Data**. The natural evolution of the World Wide Web from a set of interlinked documents to a set of interlinked entities resulted in the Web of

[1] Settore Concorsuale 01/B1 - II Fascia - Quinto Quadrimestre: https://bit.ly/45fVov8
[2] Settore Concorsuale 09/H1 - II Fascia - Quinto Quadrimestre: https://bit.ly/47DMZ6g

Data. It is a graph of information resources interconnected by semantic relations, thereby yielding the name Linked Data. The proliferation of Linked Data in recent year is an opportunity to create a new family of data-intensive applications such as recommender systems [83],[84],[85].

Supervision

Doctoral theses

- Supervisor for Lorenzo De Tomasi, University of L'Aquila (ongoing).
- Co-supervisor for Muhammad Umar Zeshan, University of L'Aquila (ongoing).
- Co-supervisor for Riccardo Rubei, University of L'Aquila (graduated with distinction).
- Co-supervisor for Claudio Di Sipio, University of L'Aquila (graduated with distinction).

Master theses

Academic year 2025–2026

- Aruzhan Amangeldina, University of L'Aquila.
- Igli Balla, University of L'Aquila.
- Matteo Cavasinni, University of L'Aquila.
- Pragati Manandhar, University of L'Aquila.
- Urina Lama, University of L'Aquila.

Academic year 2024–2025

- Alaina Faisal, University of L'Aquila.
- Motunrayo Osatohanmen Ibiyo, University of L'Aquila.
- Minase Mekete Mengistu, University of L'Aquila.
- Vinay Sanga, University of L'Aquila.
- Anastassiya Samuilova and Samal Nursapa, Mälardalen University (Sweden).

Academic year 2023–2024

- Kabita Adhikari, University of L'Aquila.
- Debayan Bhattacharya, University of L'Aquila.
- Aarohi Garg, University of L'Aquila.
- Tamsir Jobe (co-supervised with Dr. Donatella Donati), University of L'Aquila.
- Leonardo Ulderico Masci (co-supervised with Prof. Antinisca Di Marco), University of L'Aquila.
- Aicha Moussaid, University of L'Aquila.
- Mudita Shakya, University of L'Aquila.

Academic year 2022–2023

- Daria Butyrskaya, University of L'Aquila.
- Ashish Dahal, University of L'Aquila.
- Michael Dubem Igbomezie, University of L'Aquila.
- Aswin Palathumveettil Jagadeesan, University of L'Aquila (now with TU Dresden, Germany).

- Moldir Koishybayeva, University of L'Aquila.
- Farkhad Kuanyshkereyev, University of L'Aquila.

Academic year 2019–2020

- Claudio Di Sipio (co-supervised with Prof. Davide Di Ruscio), University of L'Aquila.

Academic year 2018–2019

- Riccardo Rubei (co-supervised with Prof. Davide Di Ruscio), University of L'Aquila.

Academic year 2016–2017

- Thao Nguyen, FPT University (Vietnam).
- Ngoc Nguyen, FPT University (Vietnam).
- Van Tran, FPT University (Vietnam).

Mentoring

- Since 2017, Phuong has been supervising a small group of bachelor and master students in Vietnam to work with Machine Learning and to become familiar with research activities. He has held a series of tutorials (both offline and online) about Machine Learning and scientific writing to train and inspire the group. Recently, the students started to work more with Deep Learning and write research papers, some of which have been accepted to various journals [25],[26],[27],[28],[32],[40].

Editorial and Review Activities

Editorial Activities

- Editor-in-Chief of Springer Software Quality Journal (https://link.springer.com/journal/11219/editorial-board).
- Associate Editor of Springer Applied Intelligence (https://link.springer.com/journal/10489/editorial-board).

Project Funding

- The Swiss National Science Foundation (SNSF), Switzerland.
- The National Foundation for Science and Technology Development (NAFOSTED), Vietnam.

Journals

- ACM Transactions on Software Engineering and Methodology (TOSEM).
- AIM Press Mathematical Biosciences and Engineering (MBE).
- Elsevier Computers in Biology and Medicine (CIBM).
- Elsevier Electronic Commerce Research and Applications (ECRA).
- Elsevier Expert Systems with Applications (ESWA).
- Elsevier Information Processing in Agriculture (IPA).
- Elsevier Journal of Systems and Software (JSS).
- Elsevier Medical Image Analysis (MedIA).
- Elsevier Science of Computer Programming (SCICO).
- IEEE Transactions on Software Engineering (TSE).

- IEEE Transactions on Information Forensics and Security (T-IFS).
- IET Communications.
- IET Software.
- IOP Physics in Medicine and Biology.
- Journal of Circuits, Systems, and Computers (JCSC).
- PeerJ Computer Science.
- Springer Artificial Intelligence Review (AIRE).
- Springer Empirical Software Engineering (EMSE).
- Springer Precision Agriculture (PRAG).
- Springer Soft Computing (SOCO).
- Springer Software and Systems Modeling (SoSyM).
- Springer Software Quality Journal (SQJO).
- Taylor Francis Applied Artificial Intelligence (UAAI).
- Tsinghua Science and Technology (TST).

Conferences & Workshops

2026

- The Special Track on AI for Social Impact (AISI), the Thirty-Nineth AAAI Conference on Artificial Intelligence (AAAI 2026).
- The Research Papers Track of the 48th IEEE/ACM International Conference on Software Engineering (ICSE 2026).
- The Research Papers Track of the 42nd IEEE International Conference on Software Maintenance and Evolution (ICSME 2026).
- The Technical Track of the 23rd International Conference on Mining Software Repositories (MSR 2026).
- The Research Papers Track of the 30th International Conference on Evaluation and Assessment in Software Engineering (EASE 2026).
- The Research Papers Track of the 33rd IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER 2026).

2025

- The Special Track on AI for Social Impact (AISI), the Thirty-Nineth AAAI Conference on Artificial Intelligence (AAAI 2025).
- The Research Papers Track of the 29th International Conference on Evaluation and Assessment in Software Engineering (EASE 2025).
- The Technical Papers Track of the 19th International Symposium on Empirical Software Engineering and Measurement (ESEM 2025).
- The Research Papers Track of the 22nd Joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering (FSE 2025).
- The Research Papers Track of the 41st IEEE International Conference on Software Maintenance and Evolution (ICSME 2025).

- The Technical Track of the 22nd International Conference on Mining Software Repositories (MSR 2025).
- The Research Papers Track of the 32nd IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER 2025).
- The Research Papers Track of the 18th International Conference on Cooperative and Human Aspects of Software Engineering (CHASE 2025).
- The Artifact Evaluation track of the 47th International Conference on Software Engineering (ICSE 2025).

2024

- The Special Track on AI for Social Impact (AISI), the Thirty-Eighth AAAI Conference on Artificial Intelligence (AAAI 2024).
- The Research Papers Track of the 21st Joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering (FSE 2024).
- The Technical Papers Track of the 18th International Symposium on Empirical Software Engineering and Measurement (ESEM 2024).
- The Tool Demonstrations Track, ISSTA/ECOOP 2024 conferences.
- The Research Papers Track of the 1st International Conference on AI Foundation Models and Software Engineering (Forge 2024, co-located with ICSE 2024).
- The Research Papers Track of the 28th International Conference on Evaluation and Assessment in Software Engineering (EASE 2024).
- The Research Papers Track of the 31st IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER 2024).
- The Research Papers Track of the 40th IEEE International Conference on Software Maintenance and Evolution (ICSME 2024).
- The Artifact Evaluation track of the 46th International Conference on Software Engineering (ICSE 2024).

2023

- The Special Track on AI for Social Impact (AISI), the Thirty-Seventh AAAI Conference on Artificial Intelligence (AAAI 2023).
- The Research Papers Track of the 20th Joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE 2023).
- The Technical Papers track of the International Symposium on Empirical Software Engineering and Measurement (ESEM 2023).
- The Research track of the 36th IEEE International Conference on Software Maintenance and Evolution (ICSME 2023).
- The Technical Papers track of the 20th International Conference on Mining Software Repositories (MSR 2023).
- The 2nd International Conference on AI Software Engineering, Software Engineering for AI (CAIN 2023, co-located with ICSE 2023).
- The Poster track of the 45th International Conference on Software Engineering (ICSE 2023).

- The Artifact Evaluation track of the 45th International Conference on Software Engineering (ICSE 2023).
- The Technical Papers track of the ACM/IEEE International Conference on Technical Debt 2023.

2022

- The Special Track on AI for Social Impact (AISI), the Thirty-Sixth AAAI Conference on Artificial Intelligence (AAAI 2022).
- The Technical Papers track of the 15th International Symposium on Empirical Software Engineering and Measurement (ESEM 2022).
- The Technical Papers track of the 19th International Conference on Mining Software Repositories (MSR 2022).
- The Vision papers and Emerging results track of the 25th International Conference on Evaluation and Assessment in Software Engineering (EASE 2022).
- The New Ideas and Emerging Results (NIER) track of the 38th International Conference on Software Maintenance and Evolution (ICSME 2022).
- The Artifact Evaluation track of the 31st ACM SIGSOFT International Symposium on Software Testing and Analysis (ISSTA 2022).
- The Artifact Evaluation track of the 37th IEEE/ACM International Conference on Automated Software Engineering (ASE 2022).
- The 13th International Conference on Emerging Ubiquitous Systems and Pervasive Networks (EUSPN 2022).
- The 17th Conference on Computer Science and Information Systems (FedCSIS 2022).
- The 1st International Conference on Intelligence of Things (ICIT 2022).

2014–2021

- The 12th International Conference on Emerging Ubiquitous Systems and Pervasive Networks (EUSPN 2021).
- The 24th European Conference on Artificial Intelligence (ECAI 2020).
- The 11th International Conference on Emerging Ubiquitous Systems and Pervasive Networks (EUSPN 2020).
- The 10th International Conference on Emerging Ubiquitous Systems and Pervasive Networks (EUSPN 2019).
- The 2nd Workshop on Knowledge-aware and Conversational Recommender Systems (KaRS 2018).
- The 17th International Web Engineering Conference (ICWE 2017).
- The 2nd International Conference on Nature of Computation and Communication (ICTCC 2016).
- The 5th International Conference on Context-Aware Systems and Applications (ICCASA 2016).
- The 16th International Web Engineering Conference (ICWE 2016).
- The 11th European Semantic Web Conference (ESWC 2014).
- The 4th International Conference on Context-Aware Systems and Applications (ICCASA 2015).

- The 3rd International Conference on Context-Aware Systems and Applications (ICCASA 2014).

Participation in research projects and collaborations

Research projects

- The CROSSMINER project (2017 – 2019): The EU CROSSMINER project[3] aims to develop techniques and tools exploited cutting-edge information retrieval techniques, providing software developers with practical advice on various tasks through an Eclipse-based IDE and dedicated analytical Web-based dashboards. Based on the project's mining tools, developers can select open-source software and get real-time recommendations while working on their development tasks [29],[35],[41],[42].
- The TYPHON project[4] (2018 – 2021): The aim of the project was to provide an industry-validated methodology and integrated technical offering for designing, developing, querying, evolving, analyzing and monitoring architectures for scalable persistence of hybrid data (relational, graph-based, document-based, textual etc.). In the context of TYPHON, Phuong contributed the development of languages and tools for designing hybrid polystores by taking into account the structure of the data and the available deployment resources. A recommender system was developed for supporting developers to select the storage technologies to be used for managing the designed conceptual entities.
- The Biodiversity Exploratories project[5] (2011 – 2013), University of Jena (Germany) was conducted to build BExIS, a data repository and information exchange platform. The platform is now still operating to provide researchers with a means to exchange information and experience about biodiversity across Germany.

Collaborations

- From 2021 – present: Dr. Paola Inverardi, Full Professor, Rector of the Gran Sasso Science Institute (Italy).
- From 2022 – present: Dr. Tu Bao Ho, Professor Emeritus, Japan Advanced Institute of Science and Technology (Japan), and Vietnam Institute for Advanced Study in Mathematics (Vietnam).
- From 2021 – present: Dr. Francesca Arcelli Fontana, Full Professor, Università degli Studi di Milano-Bicocca (Italy).
- From 2019 – present: Dr. Massimiliano Di Penta, Full Professor, Università degli Studi del Sannio (Italy).
- From 2019 – present: Dr. Andrea Capiluppi, Associate Professor, University of Groningen (The Netherlands).
- From 2019 – present: Dr. Michele Flammini, Full Professor, Gran Sasso Science Institute (Italy).
- From 2017 – present: Dr. Thomas Degueule, Assistant Professor, Laboratoire Bordelais de Recherche en Informatique (France).
- From 2017 – present: Dr. Ludovico Iovino, Assistant Professor, Gran Sasso Science Institute (Italy).
- From 2014 – present: Dr. Tommaso Di Noia, Full Professor, Politecnico di Bari (Italy).
- In 2017: Dr. Kai Eckert, Full Professor, Stuttgart Media University (Germany).

[3] https://www.crossminer.org
[4] https://www.typhon-project.org/
[5] https://www.bexis.uni-jena.de/

- In 2017: Dr. Azzura Ragone, Senior Researcher, Università degli Studi di Milano-Bicocca (Italy).
- In 2014: Dr. Thomas Zinner, Associate Professor, Julius-Maximilians-Universität Würzburg (Germany).
- In 2011: Dr. Birgitta König-Ries, Full Professor, Friedrich-Schiller-Universität Jena (Germany).

Talks and organizations

Invited talks

- *Detection of source code generated by ChatGPT*, University of Engineering and Technology (Vietnam), 08/2024.
- *Applications of Machine Learning in Software Engineering*, Summer School on Software Engineering for Digital Society, Giulianova (Italy), 06/2024.[6]
- *Popularity Bias in Recommender Systems for Software Engineering*, Hanoi University of Science and Technology (Vietnam), 12/2023.
- *Deep Learning for Software Engineering: The era of Large Language Models and ChatGPT*, University of Milano-Bicocca (Italy), 11/2023.
- *Applications of Machine Learning in Software Engineering*, Summer School on Software Engineering for Digital Society, Giulianova (Italy), 06/2023.[7]
- *Deep Learning in Software Engineering*, University of Engineering and Technology (Vietnam), 08/2022.
- *Applications of Recommender Systems and Machine Learning in Software Engineering*, AI Center, Hanoi University of Science and Technology (Vietnam), 08/2022 (https://bit.ly/3tFEKDO).
- *Some thoughts on the application of Deep Learning in Model-Driven Engineering*, lightning talk at the 3rd Workshop on Artificial Intelligence and Model-driven Engineering (MDE Intelligence), co-located with MODELS 2021, 10/2021.
- *Recommender Systems and Machine Learning for Software Engineering*, Università degli Studi dell'Aquila (Italy), 03/2021.
- *Unsupervised learning for document clustering*, Banking Academy of Vietnam, 04/2017.

Presentations at conferences/workshops

- *GPTSniffer: A CodeBERT-based Classifier to Detect Code Written by ChatGPT*, presentation at the 18th International Symposium on Empirical Software Engineering and Measurement, ESEM 2024, Barcelona, Spain.
- *Good things come in three: Generating SO Post Titles with Pre-Trained Models, Self Improvement and Post Ranking*, presentation at the 18th International Symposium on Empirical Software Engineering and Measurement, ESEM 2024, Barcelona, Spain.
- *LEGION: Harnessing Pre-trained Language Models for GitHub Topic Recommendations with Distribution-Balance Loss*, presentation at the 28th International Conference on Evaluation and Assessment in Software Engineering, EASE 2024, Salerno, Italy.
- *When simplicity meets effectiveness: Detecting code comments coherence with word embeddings and LSTM*, presentation at the 28th International Conference on Evaluation and Assessment in Software Engineering, EASE 2024, Salerno, Italy.

[6] https://www.se4ds.mdu.se/
[7] https://www.se4ds.mdu.se/

- *Too long; didn't read: Automatic summarization of GitHub README.MD with Transformers*, presentation at the 27th International Conference on Evaluation and Assessment in Software Engineering, EASE 2023, Oulu, Finland.
- *Fusion of deep convolutional and LSTM recurrent neural networks for automated detection of code smells*, presentation at the 27th International Conference on Evaluation and Assessment, EASE 2023, Oulu, Finland.
- *Adversarial Machine Learning: On the Resilience of Third-party Library Recommender Systems*, virtual presentation at the 25th International Conference on Evaluation and Assessment in Software Engineering, EASE 2021, Trondheim, Norway (Virtual).
- *Building Information Systems Using Collaborative-Filtering Recommendation Techniques*, presentation at the Advanced Information Systems Engineering Workshops (co-located with CAiSE 2019), Rome, Italy.
- *Knowledge-aware Recommender System for Software Development*, virtual presentation at the 2nd Knowledge-aware and Conversational Recommender Systems Workshop, KaRS 2018 (co-located with RecSys 2018), October 7, 2018, Vancouver, Canada.
- *Mining Software Repositories to Support OSS Developers: A Recommender Systems Approach*, presentation at the 9th Italian Information Retrieval Workshop, IIR 2018, Rome, Italy.
- *Finding Similar Artists from the Web of Data: A PageRank Based Semantic Similarity Metric*, presentation at the 2nd International Conference on Future Data and Security Engineering, FDSE 2015, Sai Gon, Vietnam.
- *A Context-Aware Traffic Engineering Model for Software-Defined Networks*, presentation at the 2nd International Conference on Nature of Computation and Communication, ICTCC 2014, Sai Gon, Vietnam.
- *A Context-Aware Model for the Management of Agent Platforms in Dynamic Networks*, presentation at the 2nd International Conference on Context-Aware Systems and Applications, ICCASA 2013, Phu Quoc, Vietnam.
- *Building Consensus in Context-Aware Systems Using Ben-Or's Algorithm: Some Proposals for Improving the Convergence Speed*, presentation at the International Conference on Context-Aware Systems and Applications, ICCASA 2013, Phu Quoc, Vietnam.
- *An Adaptive Communication Model for Mobile Agents inspired by the Honey Bee Colony: Theory and Evaluation*, presentation at the 10th European Workshop on Multiagent Systems, EUMAS 2012, Maastricht, the Netherlands.
- *Performance comparison of some message transport protocol implementations for agent community communication*, presentation at the 11th International Conference on Innovative Internet Community Systems, I2CS 2011, Berlin, Germany.
- *Performance Evaluation of Video SSIM Quality Metric on VQEG FR-TV Phase I Test Dataset*, presentation at the 13th International Student Conference on Electrical Engineering, POSTER 2009, Prague, Czech Republic.

Organization of Workshops

- Lola Burgueño, Dominik Bork, Phuong T. Nguyen, Steffen Zschaler, *the Fourth Workshop on Artificial Intelligence and Model-driven Engineering*, MDE Intelligence 2022, co-located with MODELS 2022.[8]

[8] https://mde-intelligence.github.io/

- Massimiliano Di Penta, Juri Di Rocco, Phuong T. Nguyen, *the First International Workshop on Evaluation and Analysis of Recommender Systems in Software Engineering* (WEARS 2021).[9] The workshop aims to bring in a forum for researchers and practitioners to share, discuss and explore the opportunities and challenges raised by the evaluation and in-depth investigation of recommender systems in Software Engineering. We solicit research work to increase the synergy among various communities, including Software Engineering, Machine Learning, and Recommender Systems.

Honours and Awards

Awards

- "***Best Paper Award***": Hoang Minh Vuong, Anh M. T. Bui, Phuong T. Nguyen, Davide Di Ruscio, "*Bake Two Cakes with One Oven: RL for Defusing Popularity Bias and Cold-start in Third-Party Library Recommendations*," the 29th International Conference on Evaluation and Assessment in Software Engineering (EASE 2025), preprint: https://arxiv.org/abs/2504.13772.
- "***2023 Best Paper Award***": Claudio Di Sipio, Juri Di Rocco, Davide Di Ruscio, Phuong T. Nguyen,"*LEV4REC: A Feature-based Approach to Engineering RSSEs*," Elsevier Journal of Computer Languages (COLA), DOI: https://doi.org/10.1016/j.cola.2023.101256.
- "***2022 SoSyM First Paper Award***": Juri Di Rocco, Davide Di Ruscio, Claudio Di Sipio, Phuong T. Nguyen, Alfonso Pierantonio, "*MemoRec: A Recommender System for Assisting Modelers in Specifying Metamodels*," Springer Software and Systems Modeling (SoSyM), DOI: https://doi.org/10.1007/s10270-022-00994-2.
- "***Best Foundation Paper Award***": Juri Di Rocco, Claudio Di Sipio, Davide Di Ruscio, Phuong T. Nguyen, "*A GNN-based Recommender System to Assist the Specification of Metamodels and Models*," DOI: https://doi.org/10.1109/MODELS50736.2021.00016 awarded by the Program Board of the 24th ACM/IEEE International Conference on Model Driven Engineering Languages and Systems, MODELS 2021, (https://https://bit.ly/2XeRAwi).
- "***Best Paper Award Winners for 2020***": Phuong T. Nguyen, Juri Di Rocco, Davide Di Ruscio, Massimiliano Di Penta "*CrossRec: Supporting Software Developers by Recommending Third-party Libraries*," Elsevier Journal of Systems and Software, 2020, ISSN: 0164-1212, DOI: 10.1016/j.jss.2019.110460, (https://bit.ly/3bZi5cx).
- "***Diamond Best Paper Award***": Phuong T. Nguyen, Juri Di Rocco, Davide Di Ruscio, Massimiliano Di Penta "*CrossRec: Supporting Software Developers by Recommending Third-party Libraries*," Elsevier Journal of Systems and Software, 2020, ISSN: 0164-1212, DOI: 10.1016/j.jss.2019.110460, (https://bit.ly/3bZi5cx).
- "***Best Paper Award***": Phuong T. Nguyen, Juri Di Rocco, Davide Di Ruscio, Alfonso Pierantonio, Ludovico Iovino, "*Automated Classification of Metamodel Repositories: A Machine Learning Approach*," DOI: 10.1109/MODELS.2019.00011, awarded by the Program Board of the 22nd ACM/IEEE International Conference on Model Driven Engineering Languages and Systems, MODELS 2019.
- "***Distinguished paper***": Phuong T. Nguyen, Juri Di Rocco, Riccardo Rubei, Davide Di Ruscio, "*CrossSim: exploiting mutual relationships to detect similar OSS projects*," in Proceedings of the 44th Euromicro Conference on Software Engineering and Advanced Applications, SEAA 2018, DOI: https://doi.org/10.1109/SEAA.2018.00069, (https://bit.ly/3hrPMr1).

[9] https://wears21.github.io/

- "***Best Paper Award***": Phuong T. Nguyen, Hong Anh Le, Thomas Zinner "*A Context-Aware Traffic Engineering Model for Software-Defined Networks*," DOI: 10.1007/978-3-319-15392-6_8, awarded by the Program Board of the 2nd International Conference on Nature of Computation and Communication, ICTCC 2014.

Scholarships

- Fellowship granted by Vietnam Institute for Advanced Study in Mathematics for a research stay (08/2022).
- Scholarship granted by the German Academic Exchange Service (DAAD) for the PhD study in Germany (2009 – 2012).
- Full scholarship granted by the Vietnamese government for the PhD study in Germany (2009 – 2012).

Programming and relevant skills

- Programming languages: Java, Python, C/C+, C#, ASP.
- Scripting languages: HTML, LaTeX.
- Version control: Git.
- IDE: Eclipse, Microsoft Visual Studio.
- Data analysis/storytelling with R, Python, Open Office, LaTeX.
- Machine Learning frameworks/platforms: Keras, TensorFlow, Scikit-learn, Google Colaboratory.

Languages

- Vietnamese (mother tongue).
- English (good).
- German (B2+, good): Phuong has worked as a freelance translator in German and Vietnamese.
- Italian (B2, basic knowledge).

Profiles

- DBLP: https://dblp.org/pid/178/5921.html.
- Google Scholar: https://scholar.google.com/citations?user=zBL5A7sAAAAJ&hl=en
- ORCID: https://orcid.org/0000-0002-3666-4162
- Scopus: https://www.scopus.com/authid/detail.uri?authorId=57209915714.
- Web of Science: https://www.webofscience.com/wos/author/record/ABE-3890-2021.

Corresponding authors in journal articles are marked with an asterisk (*).

Publications

Book chapters

[1] Davide Di Ruscio*, Phuong T. Nguyen, Alfonso Pierantonio, "*Machine Learning for Managing Modeling Ecosystems: Techniques, Applications, and a Research Vision*," Software Ecosystems: Tooling and Analytics, Springer 2023, DOI: http://dx.doi.org/10.1007/978-3-031-36060-2_10.

Journal papers

[2] Mariama Celi Serafim De Oliveira, Motunrayo Osatohanmen Ibiyo, Marco Gianrusso, Claudio Di Sipio, Davide Di Ruscio*, Phuong T. Nguyen, "*Developing LLM-based Multi-Agent Systems in Software Engineering: A Mixed-Method Experience Report*," Springer Empirical Software Engineering (EMSE), ISSN: 1573-7616, *to appear*, preprint: https://arxiv.org/pdf/2608.11965.

[3] Dang H. Vu, Quan M. Ngo, Anh M. T. Bui, Phuong T. Nguyen, Davide Di Ruscio*, Massimiliano Di Penta, "*Walking on thin ice? Defending RAG-based code recommender systems against Poisoning attacks*," Elsevier Journal of Systems and Software (JSS), ISSN: 0164-1212, DOI: https://doi.org/10.1016/j.jss.2026.113064.

[4] Muhammad Umar Zeshan, Motunrayo Ibiyo, Claudio Di Sipio, Phuong T. Nguyen, Davide Di Ruscio*, "*Many hands make light work: An LLM-based multi-agent system for detecting malicious PyPI packages*," Elsevier Journal of Systems and Software (JSS), ISSN: 0164-1212, DOI: https://doi.org/10.1016/j.jss.2026.112792.

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