

# Shuai Wang

## Formal Education

- 2017 – 2022 **Vrije Universiteit Amsterdam (VU)**, *Ph.D. Computer Science*, Amsterdam, *NL*.  
I am expecting to defend my thesis this autumn.  
Funding The NWO TOP Grant, the Netherlands Organisation for Scientific Research (NWO)  
Supervisors Prof. Frank van Harmelen and Dr. Peter Bloem  
Topic Analyzing and refining very large integrated knowledge graphs
- 2015 – 2017 **Institute for Logic, Language and Computation (ILLC), University of Amsterdam (UvA)**, *MSc Logic*, Amsterdam, *NL*.  
Tutor Dr. Benno van den Berg  
Thesis Turing Learning with Nash Memory  
Supervisors Dr. Frans Oliehoek (TU Delft), Dr. Leen Torenvliet (ILLC, UvA) and Dr. Roderich Groß (U.Sheffield)  
Summary Completed the *Logic and Computation* track with 147 ECTS (120 ECTS required).
- 2014 – 2015 **École Normale Supérieure Cachan (now École Normale Supérieure Paris-Saclay), École Polytechnique, École Normale Supérieure Paris and Université Paris Diderot (Paris 7)**, *Master Parisien de Recherche en Informatique (incomplete)*, Paris, *FR*.  
Incomplete; transferred to UvA with credits.
- 2012 – 2014 **The University of Manchester**, *BSc Artificial Intelligence*, Manchester, *UK*.  
**First class honours degree** (comparable with **cum laude**) with a high mark on the thesis.  
Tutor Prof. Uli Sattler  
Supervisor Dr. Konstantin Korovin
- 2011 – 2012 **University of Liverpool**, *BSc Artificial Intelligence (first year)*, Liverpool, *UK*.  
Ranked 4th in my year (top 5%); continued my bachelor's in Manchester after first year.  
Tutor Prof. Igor Potapov

## Professional Experience

### Employment

- 2023-present **Data Steward (0.1 FTE)** *Dept. Computer Science, Vrije Universiteit Amsterdam, Amsterdam, NL*
- 2022-present **Scientific Engineer** *UCDS group, Vrije Universiteit Amsterdam, Amsterdam, NL*  
FAIR Expertise Hub & the User-centric Data Science Group (UCDS), Vrije Universiteit Amsterdam, Amsterdam, the Netherlands  
Supervisor Dr. Ronald Siebes and Prof. Jacco van Ossenbruggen

### Research Internships

- Summer 2016 **Multi-agent Multi-contact Path Planning** *LAAS-CNRS, the Aerospace Valley, Toulouse, FR*  
Duration 4 months  
Employer The French National Research Council (CNRS)  
Supervisor Prof. Nicolas Mansard (the GEPETTO Humanoid Robot team)
- Summer 2015 **Reverse Engineering of Higher Order Proofs** *Deducteam, INRIA-Rocquencourt, Paris, FR*  
Duration 6 months  
Employer The French National Institute for Research in Computer Science and Automation (INRIA)  
Supervisor Prof. Gilles Dowek

### Research Visits

- Jan 2017 A fully funded two-week visit to Bar-Ilan University (invited by Prof. Sarit Kraus) *Ramat Gan, IL*
- Oct 2014 A one-day research visit to RWTH Aachen (with ENS Cachan) *Aachen, DE*
- Oct 2014 A one-day research visit to LAAS-CNRS (with ENS Cachan) *Toulouse, FR*

## Research Output

### Working Papers under submission (up to 24/09/2024)

S. Wang, O. Berezko, E. Kultorp, M. Stefashko, S. Fedak, O. Denyshchuk, "Linked4Resilience: Linked Open Data for Data-Centric Resilience of Damaged Cultural Properties and Infrastructures in Ukraine", under review at IEEE CSIT, 2024

### Upcoming Working Papers (up to 24/09/2024)

S. Wang, J. Raad, P. Bloem, and F. van Harmelen, "Identical or Different? Refining Very Large Integrated Identity Graphs Using Inequality Relations", to be submitted, 2024

H. Makimei, S. Wang, and W. van Peursen, "Seeing The Words: Evaluating AI-generated Biblical Art", to be submitted to the International Journal of Humanities and Arts Computing, 2024

J. A. Klaver, S. Wang, A. Rowland, R. Siebes, "Assessing the Preservation, Usability, and FAIRity of Cadastral Linked Open Data", to be submitted to the Goinformatica journal, 2024

S. Wang, A. Maineri, R. Mourits, T.M. Hofstra, "Towards Rigorous Data Upcycling using the FAIR Implementation Profile: A Case Study", to be submitted to the Historical Life Course Studies Journal.

S. Wang, M. Adamidou, "Translating and Integrating LGBTQ+ Vocabularies", to be submitted.

### Conference Research Papers

S. Wang, M. Adamidou "Examining LGBTQ+-related Concepts in the Semantic Web: Link Discovery, Concept Drift, Ambiguity, and Multilingual Information Reuse", International Conference on Knowledge Engineering and Knowledge Management (EKAW), 2024

N. K. Singh, S. Wang, A. Maineri, R. Siebes, M. Bruyneel, T. Hofstra, S. van de Sandt, R. Siebes, J. van Ossenbruggen, T. Kuhn "Aligning Data Management Plans with Community Standards using FAIR Implementation Profiles", International Conference on Metadata and Semantics Research (MTSR), 2024

X. Pan, S. Wang, T. Liu, V. de Boer, J. van Ossenbruggen, and Z. Huang, "Enhancing Scholarly Recommendation Systems by Improving the Modeling of the Diversity of Researchers' Interest", Asian Conference on Intelligent Information and Database Systems (ACIIDS), 2024

D. Vlantis, I. Gornishka, and S. Wang, "Benchmarking the Simplification of Dutch Municipal Text", The 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation Conference Centre (LREC-COLING), 2024.

R. Stöhr, S. Wang and Z. Huang, "Knowledge Modelling, Strategy Designing, and Agent Engineering for Reconnaissance Blind Chess", International Conference on Agents and Artificial Intelligence (ICAART), 2024.

S. Wang, A. Maineri, N. K. Singh, and T. Kuhn, "FAIR Implementation Profiles for Social Science", *International Conference on Metadata and Semantics Research (MTSR)*, 2023

S. Wang, J. Raad, P. Bloem, and F. van Harmelen, "Refining identity graphs with the Unique Name Assumption," in *European Semantic Web Conference (ESWC)*, 2023

S. Wang, J. Raad, P. Bloem, and F. van Harmelen, "Refining transitive and pseudo-transitive relations at web scale," in *European Semantic Web Conference (ESWC)*, 2021

S. de Bever, D. Formolo, S. Wang, and T. Bosse, "A multimodal chatbot system for enhancing social skills training for security guards," in *International Conference on Human Computer Interaction (HCI)*, 2019

G. Lan, L. de Vries, and S. Wang, "Evolving efficient deep neural networks for real-time object recognition," in *IEEE Symposium Series on Computational Intelligence (SSCI)*, 2019

S. Wang, "Robot ethical training with dynamic ethical preference logic," in *the 19th International Conference on Climbing and Walking Robots and Support Technologies for Mobile Machines (CLAWAR 2016)*, 2016 (the paper was also included in the book *Advances in Cooperative Robotics* by World Scientific, ISBN: 978-981-3149-12-0)

### Resource Papers

M. Attar, S. Wang, R. Siebes, and E. Kultorp, "Converting and Enriching Geo-annotated Event Data: Integrating Information for Ukraine Resilience" in *International Conference on Advances in Geographic Information Systems (ACM SIGSPATIAL)*, 2023

### Research Workshop Papers

S. Wang, "What does it mean when your uris are redirected? examining identity and redirection in the lod cloud," in *Workshop on Managing the Evolution and Preservation of the Data Web (MEPDaW)*, 2022

S. Wang, "On the analysis of large integrated knowledge graphs for economics, banking, and finance," in *International Workshop on Knowledge Graphs for Economics and Finance (EcoFin)*, 2022

S. Wang, J. Raad, P. Bloem, and F. van Harmelen, "Submassive: Resolving subclass cycles in very large knowledge graphs," in *Workshop on Large Scale RDF Analytics (LASCAR)*, 2020

S. Wang, "Towards dynamic epistemic learning of actions for self-improving agents and multi-agent systems," in *the 3rd Workshop on Self-Improving System Integration (SISSY)*, 2016

### Other Presented Full Papers (included in online conference proceedings)

S. Wang, and A. Maineri, "Towards Rigorous Data Upcycling using the FAIR Implementation Profile for the SSHOC-NL Socio-Economic History Community", *The legacy4reuse Workshop: Criteria and Methods for Upcycling Data Collections in Social and Economic History*, 2023.

E. Ayten, S. Wang, and H. Snoep, "Surrealistic-like Image Generation with Vision-Language Models", *Joint international Scientific conferences on AI and Machine Learning (BNAIC-BeNeLearn)*, Delft, 2023.

R. Stöhr and S. Wang, "Deciphering enemies in the darkness through modeling and examination of knowledge in reconnaissance blind chess," in *Theory of Mind Workshop @ ICML*, 2023

S. Wang, "A quantitative analysis of kernel extension for higher order proof checking," in *ESSLLI 2016 Student Session*, 2016

S. Wang, "Proofcloud: A proof retrieval engine for verified proofs in higher order logic," in *12th International Workshop on User Interfaces for Theorem Provers (UITP)*, 2016

S. Wang, "Reasoner-aid research: Potentials and popularity," in *Benelux conference on Artificial Intelligence (BNAIC)*, 2016

### Extended Abstracts and Posters

S. Wang, A. Maineri, N. K. Singh, and T. Hofstra, "FAIR Implementation Profiles for the Social Sciences and Their Use Cases", *International FAIR Digital Objects Implementation Summit*, Berlin, 2024.

H. Makimei, S. Wang, and W. van Peursen, "Generating and Comparing AI-generated Biblical Images", *BeNeLux joint international Scientific conferences on AI and Machine Learning (BNAIC-BeNeLearn)*, Delft, 2023.

J. J. Puusaag, S. Koolman, G. Arashiro, S. Wang, X. Wilcke, "Identifying Historical Occupations in Text using HISCO: A User-Centric Approach", *Benelux Digital Humanities Conference (DH Benelux)*, 2023.

A. Kazarian, S. Wang, "Evaluating automated translation of LGBTQ terms: towards multilingual Homosaurus", *Global Digital Humanities Symposium (GlobalDH)*, online, 2023.

I. Nasim, S. Wang, "Examining the Evolution of Identity Links in the LOD Cloud", *Benelux Artificial Intelligence Conference (BNAIC)*, Mechelen, Belgium, 2022.

S. Wang, "On the analysis of large integrated knowledge graphs for economics, banking and finance", *ICT OPEN 2022*, Amsterdam, 2022.

S. Wang, "Turing Learning with Nash Memory", *Delft Workshop on Robot Learning*, Delft, 2017.

S. Wang, "Higher order proof engineering: Proof collaboration, transformation, checking and retrieval," in *Conference on Artificial Intelligence and Theorem Proving (AITP)*, 2016

S. Wang and K. Hu, "Towards dynamic epistemic learning of actions in autonomic multi-agent systems," in *the 13th IEEE International Conference on Autonomic Computing (ICAC)*, 2016

S. Wang, "Proofcloud: A proof retrieval engine for verified proofs in higher order logic," in *28th Benelux conference on Artificial Intelligence (BNAIC)*, 2016

### Abstracts

S. Wang, and M. Adamidou, "Examining LGBTQ+-related Concepts and Their Links in the Semantic Web", *ODISSEI Conference for Social Science in the Netherlands*, 2024.

S. Wang, A. Maineri, R. Siebes, "Use Cases of FAIR Implementation Profiles in Social Sciences and Humanities", *ODISSEI Conference for Social Science in the Netherlands*, 2024.

S. Wang, and M. Adamidou, "Examining LGBTQ+-related Concepts and Their Links in the Semantic Web", 16th Semantic Web in Libraries Conference (SWIB'24), 2024.

S. Wang, R. Siebes, R. Braukmann, J. Touber, and J. Mulder, Evaluating AI-generated biblical art, Using the FAIR Implementation Profile for Research Infrastructures, the Open Science Festival, 2024.

W. van Peursen, S. Wang, and H. Makimei, Evaluating AI-generated biblical art, Global Network for Digital Theology Conference, 2024.

X. Wilcke, S. Wang, and R. Zijdeman, Semi-automatic Entity Recognition Using Historical Occupational Vocabulary, Conference of The European Society of Historical Demography (ESHD), 2023.

Al Idrissou, Shuai Wang, Rick Mourits, Auke Rijpma, Xander Wilcke, Richard Zijdeman, and Sytze Van Herck, Generic explainable rules for quality assessment of civil registries co-referents, Conference of The European Society of Historical Demography (ESHD), 2023.

A. Maineri, S. Wang, E. Beretta, T. Kuhn, "The FAIR Expertise Hub: enacting the FAIR principle in social science", ODISSEI Conference for Social Science in the Netherlands, Utrecht, 2022.

A. Maineri, S. Wang, "FAIR Implementation Profile for Social Sciences and Humanities", ODISSEI Conference for Social Science in the Netherlands, Utrecht, 2023.

## Demos

M. Attar, S. Wang, R. Siebes, and E. Kultorp, "Using Integrated and Enriched Linked Data for Ukraine Resilience", BeNeLux joint international Scientific conferences on AI and Machine Learning (BNAIC-BeNeLearn), Delft, 2023.

S. Wang, S. Tonneau, and N. Mansard, "Multi-agent multi-contact path planning with HPP," in *28th Benelux Conference on Artificial Intelligence (BNAIC)*, 2016

## Internship Reports

Multi-agent Multi-contact Path Planning, LAAS-CNRS, Toulouse, 2016

Reverse Engineering of Higher Order Proofs, INRIA, 2015

## Theses

MSc thesis: Turing Learning with Nash Memory, U.Amsterdam, 2017

BSc thesis: A Logic-based Approach for RNA Secondary Structure Prediction, U.Manchester, 2014

## Tools and Platforms

- 1 ANN'it *A user-friendly interface for fast annotation of triples.*
- 2 TuringLearner *A platform for Turing Learning*
- 3 HOLALA *A higher order reasoner based on HOL Light but with an extended kernel.*
- 4 HOLIDE2 *A proof translator from OpenTheory format to Dedukti format.*
- 5 ProofCloud *A verified proof search engine for HOL proofs.*
- 6 XNA *RNA secondary structure predictor using Z3/SAT4J*
- 7 MMPP *A multi-agent multi-contact path planning demo using HPP.*
- 8 Scorca *A leading bot for the Reconnaissance Blind Chess game in 2023.*
- 9 Linked4Resilience.eu *A platform with use cases of linked data for Ukraine resilience.*
- 10 A semiautomated pipeline using DeepL for the translation of LGBTQ+ terms

## Published (Linked) Open Data

### Linked Data for Research

- 1 SUBMASSIVE: we published the largest refined directed acyclic graph of `rdfs:subClassOf` (4.4 million triples) and `rdfs:subPropertyOf` (80K triples).
- 2 Weighted transitive relations graphs: 19.5 million triples of 10 common (pseudo-)transitive relations with weights.
- 3 A manually annotated gold standard for `skos:broader` and `rdfs:subClassOf`: 2K manually annotated triples.
- 4 Explicit and implicit sources for entities in the identity graphs in the LOD cloud.

- 5 A manually annotated gold standard for 8,394 entities in 28 selected connected components from the identity graph in the LOD cloud.
- 6 A new identity graph that consists of 409 million identity links and 433 million unique entities.
- 7 Multiple FAIR Implementation Profiles in social science as nanopublication.
- 8 A mapping between the FAIR Implementation Profile (template) and the VU Data Management Plan (template).
- 9 A large integrated knowledge graph of 324K entities and 1.7 million triples for Economics, Finance, and Banking.  
[Linked Data for Applications](#)
- 10 A large dataset of integrated linked data for the resilience of Ukraine hosted on TriplyDB.  
[Other Datasets](#)
- 11 Visio Divina Dataset (to be published): A large dataset of 7K images generated using biblical text.

## Project Experience

### Research Projects

2022-2024 **The FAIR Expertise Hub Project** *VU, NL*  
 Supervisors Prof. Jacco van Ossenbruggen, Dr. Ronald Siebes  
 Summary The full name of the project is “Building a FAIR Expertise Hub for the social sciences”. In this project, we develop FAIR Implementation Profiles and study how we can use them to help communities in social science and humanities make their data more FAIR. A use case project we collaborated with the Open Science team of the University Library won the Open Science Community Awards in 2024. Members of the project include Angelica Maineri, Tobias Kuhn, etc.

2017-2022 **The MaestroGraph Project** *VU, NL*  
 Supervisors Prof. Frank van Harmelen  
 Summary My PhD is a part of the NWO-funded MaestroGraph project. The project investigates how the meaning of a knowledge graph affected by its structure. We design algorithms that exploit the graph structure for effective use of very large knowledge graphs. Members of the project include Wouter Beek, Joe Raad, Erman Acar, etc.

### MSc Thesis Project

2016-2017 **Turing Learning with Nash Memory** *UvA, NL*  
 Supervisors Dr. Frans Oliehoek (TU Delft), Dr. Roderich Groß(Sheffield), Dr. Leen Torenvliet (ILLC)  
 Summary Turing Learning is a method for the reverse engineering of agent behaviors. Nash memory is a memory mechanism for coevolution which guarantees monotonicity in convergence. This thesis explores the integration of such memory mechanism with Turing Learning for faster learning of agent behaviors. We employ the Enki robot simulation platform and learns the aggregation behavior of epuck robots.

### BSc Thesis Project

2013-2014 **RNA secondary structure prediction with SAT/SMT Solvers** *U. Manchester, UK*  
 Supervisor Dr. Konstantin Korovin  
 Summary The project aimed to predict the secondary structure of RNA using a new logic-based approach that takes full advantage of two state-of-the-art reasoners: Z3 and SAT4J. We encoded energy constraints and structural constraints. The solution corresponds to a prediction of the secondary structure for each input RNA sequence.

### Other Research Projects

Jan 2016 **Symbolic Model Checking for the  $\mu$ -Calculus** *U. Twente, NL*  
 Supervisor Prof. Jaco van de Pol  
 Jan 2016 **Deontic Logic Research Project** *ILLC, UvA, NL*  
 Supervisor Dr. Roberto Ciuni (ILLC & University of Padova)

### Others

2022-present **Linked4Resilience** *Independent Project*  
 2017 The Mauritshuis Challenge (using IBM Bluemix APIs) *Group project, VU, NL*  
 2017 KE4KE (using the FOAF Ontology, IBM Bluemix API, etc.) *Group project, VU, NL*

## Educational Experience

### Teaching Experience

Autumn 2023 **Knowledge Organization** (MSc CS/A.I.), VU.

Lecturer Dr. Tobias Kuhn

Duties I was involved in setting up the video lecture, proof-reading the exam questions, and marking the exams.

Winter 2021 **Deep Learning** (MSc A.I.), VU & UvA. More details at <https://dlvu.github.io/>.

Lecturers Prof. Michael Cochez and Dr. Peter Bloem

Duties This course covers various aspects of Deep Learning including Convolutional Neural Networks, Sequential data, Latent Variable Models, GANs and Reinforcement learning, etc. My duty as an TA was to help students with their group assignments and individual assignments.

Spring 2021 **A.I. for Health** (MSc A.I.), Wuhan University of Science and Technology (online)

Lecturers Prof. Annette ten Teije and Prof. Judith E. Bosmans

Duties This VU course was adapted and delivered to the master students in Wuhan as a part of the long-term collaboration with the Wuhan University of Science and Technology. I was the teaching assistant for this special bilingual course delivered at remote.

Winter 2020 **Intelligent Systems** (first year BSc Artificial Intelligence), VU, NL

Lecturer Dr. Stefan Schlobach

Duties I was a teaching assistant for the Intelligent Systems course, a course that was newly adapted to first year bachelor students. The course covered logical agents, Bayesian network, Machine Learning, etc. I coached two group of 42 students for their assignments and projects.

Winter 2017 **Knowledge Representation** (first year MSc Artificial Intelligence), UvA&VU, NL

Lecturer Prof. Frank van Harmelen

Duties I was a teaching assistant for the Knowledge Representation course. I coached in total 43 students and supervised 70+ projects. I delivered 7 tutorials and organised 8 project meetings. I audited the exam and marked 40+ project reports in 2017.

2017-2022 **Others**

In addition, I have been involved in the marking of exams/assignments in the Social A.I. course. Following the change of the course format of the Knowledge Representation course, I was involved in the marking of exams and project reports in 2018, 2019, and 2020.

### Group Project Supervision (for the Digital Humanities Minor, VU)

2023 Jaan Joosep Puusaag, Guilherme Rodrigues Arashiro, Stacey Koolman (Digital Humanities minor, VU): Identifying Historical Occupations in Text using HISCO: A User-Centric Approach

Co-supervisor: Xander Wilcke

### Theses Supervision

2023-2024 Maria Adamidou (MSc Computer Science, VU): Translating and Integrating LGBTQ+ Vocabularies

Co-supervisors: Jacco van Ossenbruggen (VU), Andrei Nesterov (CWI)

Advisor: Jack van der Wel (IHLIA)

2023 Navroop K. Singh (BSc Computer Science, VU): Aligning Data Management Plans with Community Standards using FAIR Implementation Profiles (in collaboration with the Open Science team of the University Library)

In collaboration: Angelica M. Maineri (FAIR Expertise Hub, EUR)

2023 Jeroen Klaver (BSc Computer Science, VU): Examining the Cadastral Linked Open Data on the Web: Usability, Preservation, and FAIR Assessment (internship at Kadaster)

Co-supervisor: Alexandra Rowland (Kadaster)

2023 Elif Ayten (BSc Artificial Intelligence, VU): Surrealistic-Like Image Generation with Vision-Language Models

Co-supervisor: Hjalmar Snoep (Snoep Studio)

2023 Daniel Vlantis (BSc Artificial Intelligence, VU): Simplifying Dutch Municipal Text: A Pivot-based Approach (Internship at Amsterdam Intelligence)

Co-supervisor: Iva Gornishka (Amsterdam Intelligence, Gemeente Amsterdam)

- 2023 Hidde Ngunjiri Gitau Makimei (BSc Computer Science, VU): Seeing The Words: Evaluating AI-Generated Biblical Art in Comparison to Art from the Renaissance Era  
Co-supervisor: Willem van Peursen (VU)
- 2022-2023 Manar Attar (BSc Computer Science, VU): Converting and Unifying Geo-annotated Event Data: Integrating Information for Ukraine Resilience  
Co-supervisor: Ronald Siebes (VU)
- 2022-2023 Robin Stöhr: Modelling and Analysis of Knowledge in Reconnaissance Blind Chess  
Co-supervisor: Zhisheng Huang (VU).
- 2022-2023 Ata Turan Oguz (BSc, VU): Semantic Interoperability of Linked Data for Personal Greenhouse Gas Emission Reporting: a Case Study of Amsterdam as a smart city  
Co-supervisor: Zhisheng Huang.
- 2022 Anna-Maja Kazarian (BSc, VU): Evaluating automated translation of LGBTQ+ terms: towards multilingual Homosaurus  
In collaboration: Jack van der Wel and Wilfred Buuren (IHLIA)
- 2022 Tianyang Lu (MSc Computer Science, VU&UvA): Smart Urban Resilience: A Linked Data Approach  
Co-supervisor: Zhisheng Huang (VU).
- 2022 Khaled Rabata (BSc, VU): A Qualitative Investigation on the Performance of Geospatial Triplestores (internship at Kadaster)  
Co-supervisors: Zhisheng Huang (VU) and Erwin Flomer (Kadaster).
- 2021-2022 Idries Nasim (BSc, VU): Examining the Evolution of Identity graphs Through Redirection.
- 2017-2018 Lucas de Vries (MSc Information Studies, VU-UvA): NeuroEvolution for Real-time Object Recognition  
Co-supervised with Gongjin Lan (VU) and Jadran Sirotkovic (Accenture).
- 2018 Tico van der Laan (BSc, VU): Using human facial expression for interpersonal stances.  
Co-supervisors: Daniel Formolo (VU) and Tibor Bosse (RU Nijmegen).
- 2018 Stein de Bever (BSc, VU): Free speech dialogues for harmony in human relations.  
Co-supervisors: Daniel Formolo (VU) and Tibor Bosse (RU Nijmegen).

## Academic Engagement

### PC, Reviewing, and (Co-)Chairing

- 2024 Ordinary PC and Reviewer, Poster & Demo track, the International Semantic Web Conference (ISWC), 2024
- 2023 PC and session co-chair, LD4 Conference on Linked Data, online
- 2023 Reviewer, Alice and Eve, LAB42, Amsterdam Science Park, Amsterdam, NL.
- 2023 Session co-chair (session on knowledge graph refinement and validation), European Semantic Web Conference (ESWC), Hersonisoss, GR.

### Research Visitors Hosting

- 2023 I hosted the research visit of Dr. Joe Raad in December 2023. *Amsterdam, NL*

### Conference Volunteering

- 2023 Volunteer, UK-Ukraine Twinning, Hybrid (online and in Liverpool)
- I was a volunteer for the infrastructure, focusing on the poster sessions and the Gather Town.
- Jun 2021 Volunteer, European Semantic Web Conference (ESWC), online
- I was a volunteer for the ESWC conference where I communicated with conference chairs, recorded presentations, and answered attendees' questions.
  - I was also a volunteer at the co-located knowledge graph construction workshop.
- Jul 2014 Volunteer, Vienna Summer of Logic, TU Wien, AT.
- I worked as an assistant at the ACL2 and EC2 conferences at the Vienna Summer of Logic. I have also attended many talks at the LICS, IJCAR, CAV, KR, etc.

### Community Engagement

- 2022-2024 Development of multilingual workflow, the Homosaurus Community

- 2024-present General assistant, the GSSO/IgbtDB Community  
2024-present RDA group: Alignment of multilingual vocabularies in the social sciences and humanities WG

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## Honours

### Awards, Scholarships and Grants

- 2024 Winner, Open Science Community Amsterdam Awards (OSCA) 2024, Amsterdam, €400.  
2018 Travel grant, ACAI summer school, EurAI & University of Ferrara, €400.  
2017 NWO TOP grant for doctoral studies, MaestroGraph project, VU Amsterdam & NWO.  
2017 Travel grant (for a visit of 2 weeks), Bar-Ilan University, €788.61.  
2016 Support grant (sponsored by Google), ICAC'16, €791.60.  
2016 Student grant, ESSLLI'16, €350.  
2016 Student grant, COMSOC'16, €50.  
2016 ILLC student travel grant ×2, ILLC, €200.  
2014-2015 INRIA-MPRI Scholarship, INRIA and ENS Cachan, €12,000.  
2014 Travel Grant for Vienna Summer of Logic, U.Manchester, £803.05.  
2013 Student Grant for the British Logic Colloquium, ~£110, U.Leeds.

### Competitions

- 2022 The Audience Award, *72-hour VU Film Challenge*, Amsterdam.  
2021 Winner, the student writing contest *VU Pride*, Amsterdam.  
2013 Finalist (12 out of 124 submissions), *EUREKA Library Innovation Challenge*, Manchester, UK.  
2012 3rd place (as the leader of the Kilburn team), the *Barclays IT Bit Challenge*, Manchester, UK.

### Membership

- 2017-2022 PhD student member, BNVKI & EurAI, NL.  
2013-2023 Student member, British Logic Colloquium (BLC), UK.  
2013-2021 Associate member, London Mathematical Society (LMS), UK.  
2017-2019 PhD student member, Association for Symbolic Logic (ASL), US.  
2016-2017 Student member, CLAWAR Association Ltd, London, UK.  
2012-2014 Student member, Royal Aeronautical Society (the Manchester Branch), UK.  
2014-2015 Student member, AAAI, USA.  
2012-2013 Student member, IEEE, USA.

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## Certificates

### Professional Certificates

- 2023 FAIR Implementation Facilitator, GO FAIR Foundation.  
2021 Research Integrity - Engineering and Technology, Oxford University Press and Epigeum.  
2021 Certificate of Advanced Academic Writing for PhD researchers, Vrije Universiteit Amsterdam.

### Certificates of Online Courses

- 2017 Structuring Machine Learning Projects, deeplearning.ai on Coursera.  
2013 Artificial Intelligence Planning, University of Edinburgh on Coursera.  
2012 Game Theory, Stanford University on Coursera.

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## Other Activities

### Student Society

- 2013-2014 President, Manchester Ultimate Programming (student society), Manchester, UK
- We organized fortnightly master classes and some hackathon events.
  - I chaired the first Ultimate Programming Workshop. We invited companies such as IBM, BBC, AppSense for workshops and master classes.
- 2012-2013 Marketing assistant, Manchester Computer Science Society (student society), Manchester, UK



- o I was in the marketing team to help design posters and flyers.

### Summer School

2023 Lecturer, Summer School of Dr. AI for Children, Shanghai, CN.

- o We organized some master classes for students between 8 and 13 years old and introduced recent advances in Artificial Intelligence. The summer school was organised by Prof. Zhisheng Huang and took place in the AI Research Center for Mental Health, Tongji University, Shanghai.

### Volunteering

May 2013 sUAVe Aerial Photographers, Kilve Beach, UK

- o I worked as an assistant for drone and helicopter control for space exploration. We collected data for geographical research of the landscape of the Kilve beach.

2013-2014 Museum of Science and Industry, "Baby Computer" Volunteer (level 2), Manchester, UK.

2013-2014 Manchester Deaf Centre, volunteer, Manchester, UK.

Jun 2012 MerseySTEM VEX Challenge (using VEX Robot Kit) at Deyes High School, volunteer, UK.

Jul 2013 Deershed Festival (using LEGO Robots), Robogals, volunteer, UK.

### Web Development

Personal <https://shuai.ai>

Research <https://submassive.cc> (2019-2021)

<https://fairexpertisehub.org>

<https://linked4resilience.eu>

Commercial <https://wijsjesvanweleer.nl> (2020-2023)

## Multilingual Proficiency

Chinese Native

English Professional working proficiency

French A2

Dutch A1-A2

## References

### Name

- o Prof. Frank van Harmelen  
Professor  
Vrije Universiteit Amsterdam
- o Prof. Jacco van Ossenbruggen  
Professor  
Vrije Universiteit Amsterdam

### Contact

- o [frank.van.harmelen@vu.nl](mailto:frank.van.harmelen@vu.nl)
- o [jacco.van.ossenbruggen@vu.nl](mailto:jacco.van.ossenbruggen@vu.nl)

## Appendix

### Conferences and Workshops with Presentations (excluding posters)

- 2024 International Conference on Metadata and Semantics Research (MTSR), Athens, GR
- 2024 International Conference on Knowledge Engineering and Knowledge Management (EKAW), Amsterdam, NL
- 2024 The ODISSEI conference, Utrecht, NL
- 2024 FAIR Digital Object (FDO) Summit, Berlin, DE
- 2023 Legacy4reuse Workshop: Criteria and Methods for Upcycling Data Collections in Social and Economic History, online
- 2023 The ODISSEI Conference, Rotterdam, NL
- 2023 International Conference on Metadata and Semantics Research (MTSR), Milan, IT
- 2023 European Society of Historical Demography (ESHD), Nijmegen, NL
- 2023 Benelux Conference on Artificial Intelligence (BNAIC), Delft, NL
- 2023 Theory of Mind Workshop (co-located with ICML), online
- 2023 European Semantic Web Conference (ESWC), Hersonisoss, GR
- 2023 Global Digital Humanities Symposium, online
- 2022 LGBTQ+ Research Day, Amsterdam, NL
- 2022 ODISSEI Conference for Social Science in the Netherlands, Utrecht, NL
- 2022 Benelux Conference on Artificial Intelligence (BNAIC), Lamot Mechelen, BE
- 2022 ICT Open 2022, Amsterdam, NL.
- 2022 International Workshop on Knowledge Graphs for Economics and Finance (EcoFinKG), online.
- 2021 European Semantics Web Conference (ESWC), online.
- 2020 Workshop on Large Scale RDF Analytics (LASCAR), online.
- 2017 Delft Workshop on Robot Learning, TU Delft, Delft, NL.
- 2016 Benelux conference on Artificial Intelligence (BNAIC), Amsterdam, NL.
- 2016 International Workshop on User Interfaces for Theorem Provers (UITP, IJCAR), Coimbra, PT.
- 2016 Workshop on Self-Improving System Integration (SISSY), Würzburg, DE.
- 2016 IEEE International Conference on Autonomic Computing (ICAC), Würzburg, DE.
- 2016 International Conference on Climbing and Walking Robots and Support Technologies for Mobile Machines (CLAWAR 2016), London, UK.
- 2016 Conference on Artificial Intelligence and Theorem Proving (AITP), Obergurgl, AT.

### Other Conferences and Workshops Attended

- 2024 SEMANTiCS Conference, Amsterdam, NL
- 2024 Sino-Dutch Forum on Smart City, Amsterdam, NL
- 2024 International Symposium on Artificial Intelligence for Medical Sciences, Amsterdam, NL
- 2024 The Road to FAIR and Equitable Science, Leiden, NL
- 2023 Sino-Dutch Forum on Smart City, online
- 2023 Metadata Matters, What Role Does Linked (Meta)Data Play in the Geospatial World?, Hilversum, NL
- 2023 National Open Science Festival, Rotterdam, NL
- 2023 International Conference on Semantic Systems (Semantics), Leipzig, DE
- 2023 RDA 20th Plenary Meeting, online
- 2023 The European Data Conference on Reference Data and Semantics (ENDORSE), online
- 2023 Interdisciplinary Workshop on the Digital Society, VU Amsterdam, NL
- 2022 Open Science and Research Data Management Training Days, Amsterdam, NL
- 2022 International Conference on FAIR Digital Objects (FDO), Leiden, NL
- 2022 National Open Science Festival, Vrije Universiteit Amsterdam, Amsterdam, NL
- 2022 LD4 Conference on Linked Data, online
- 2022 Connecting World Conference, Vrije Universiteit Amsterdam, Amsterdam, NL
- 2022 International Conference on Hybrid Human-Artificial Intelligence (HHAI), Amsterdam, NL.
- 2021 EAISI Summit (Eindhoven Artificial Intelligence Systems Institute), online.
- 2021 International Workshop on Explainable Sentiment Mining and Emotion Detection (X-SENTIMENT), online.

- 2021 Second International Workshop On Knowledge Graph Construction (KGC), online.
- 2020 International Joint Conference on Automated Reasoning (IJCAR), online.
- 2020 European Semantics Web Conference (ESWC), online
- 2019 National eScience Symposium 2019, Amsterdam, NL.
- 2019 ARIAS workshop: Listening with Artificial Intelligence: Meeting of the Minds, Amsterdam, NL.
- 2017 International Conference on Semantic Systems (Semantics), Amsterdam, NL.
- 2017 Young Researcher Workshop on Economics and Computation (YoungEC '17), Tel Aviv, IL.
- 2016 International Workshop on Computational Social Choice (COMSOC), Toulouse, FR.
- 2016 Responsible Intelligent Systems workshop (REINS), Utrecht, NL.
- 2015 Amsterdam Colloquium 2015, Amsterdam, NL.
- 2015 Hilbert's Epsilon and Tau In Logic, Informatics and Linguistics, Montpellier, FR.
- 2014 Vienna Summer of Logic (VSL), TU Wien, AT.
- 2013 British Logic Colloquium (BLC), The University of Leeds, Leeds, UK.
- 2013 International Symposium on Fundamentals of Computation Theory (FCT), Liverpool, UK
- 2013 London Mathematical Society (LMS) regional meeting, Leicester, UK.

### Summer/Winter Schools

- 2020 SIKS Winter School: From Data Lakes to Knowledge Graphs, online.
- 2019 Summer School on Statistical Relational Artificial Intelligence (ACAI), Ferrara, IT.
- 2019 Advanced Course on Data Science & Machine Learning (ACDL), Certosa di Pontignano, IT.
- 2019 Nordic Probabilistic A.I. School (ProbAI), NTNU, Trondheim, NO.
- 2018 Summer School on Statistical Relational Artificial Intelligence (ACAI), Ferrara, IT.
- 2016 28th European Summer School in Logic, Language and Information (ESSLLI), IT.
- 2013 15th European Agent Systems Summer School (EASSS), London, UK.
- 2012 24th European Summer School in Logic, Language and Information (ESSLLI) Opole, PL.