Olga Petrovska, SFHEA

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in olgapetrovska

★ Swansea, Wales, UK

Employment

2022 – · · · ·	Head of Final Year at Computer Science Department, Swansea University, UK
2020 - · · · ·	■ Teaching Fellow at Computer Science Department, Swansea University, UK

2020 – 2024 **Technology Consultant** and **Project Manager** at Ukraïner.net, remote (part-time)

2016 − 2020 **Teaching Assistant** at Swansea University, UK (*part-time*)

2013 – 2015 Project Manager / Team Leader at Wolfestone, Swansea, UK

2010 – 2012 **Web Production Lead / Internal Relationships Leader** at IBM, Bratislava, Slovakia

Positions of Responsibility and Community Service

2025 - · · · ·	Program Committee Member for the Continuity, Computability, Constructivity con-
	ference (CCC 2025)

Reviewer for the several international journals (Frontiers in Education, Information and Software Technology, and IEEE Access) and conferences (OpenEd25, ITP'25, and BCSWomen Lovelace Colloquium)

2023 - · · · Council Member at the Association of Computability in Europe

Project Support Officer at the UK-Ukraine Academic Mentorship Scheme

2022 – 2023 Member of the Disciplinary Commons in Theoretical Computer Science

2020 – · · · · Treasurer at the British Colloquium for Theoretical Computer Science

Education

2016 – 2021 Ph.D., Computer Science, Swansea University, UK
Thesis: Enhanced Realizability Interpretation for Program Extraction

2015 – 2016 M.Sc., Computer Science, Swansea University, UK

Thesis: Prawf: Interactive Proof Assistant for Predicate Logic

2006 – 2007 Master's Degree, Philology, Chernivtsi National University, Ukraine Thesis: The Functional-Semantic Field of Quantity in John Fowles' Discourse

2002 – 2006 **Bachelor's Degree, Pedagogy**, Ternopil National Pedagogical University, Ukraine

Secondments and Residences

Jul-Aug. 2018 Residence at the Hausdorff Trimester Program (Hausdorff Research Institute for Mathematics, Germany)

Mar-Apr. 2018 Secondment at the Mathematical and Information Sciences Division of the Human and Environmental Studies Faculty (Kyoto University, Japan)

Mar-May. 2017 Secondment at the School of Mathematics and Statistics (University of Canterbury, New Zealand)

Publications

Conference Proceedings

- O. Andrei, S. W. Nabi, M. Barr, and O. Petrovska, "Integrating socially responsible computing competencies in computer science and software engineering education," in *Proceedings of the 9th Conference on Computing Education Practice*, Durham United Kingdom: ACM, Jan. 2025, pp. 36–37.

 **DOI: 10.1145/3702212.3702225.
- L. Clift and O. Petrovska, "Learning without limits: Analysing the usage of generative AI in a summative assessment," in *Proceedings of the 9th Conference on Computing Education Practice*, Durham United Kingdom: ACM, Jan. 2025, pp. 5–8. DOI: 10.1145/3702212.3702214.
- O. Petrovska, R. Pearsall, and L. Clift, "Assessing software engineering students' analytical skills in the era of generative AI," in *Proceedings of the 9th Conference on Computing Education Practice*, Durham United Kingdom: ACM, Jan. 2025, pp. 34–34. ODOI: 10.1145/3702212.3702223.
- O. Petrovska, L. Clift, F. Moller, and R. Pearsall, "Incorporating generative AI into software development education," in *Proceedings of the 8th Conference on Computing Education Practice*, ser. CEP'24, Durham, United Kingdom: Association for Computing Machinery, 2024, pp. 37–40, ISBN: 9798400709326. ODI: 10.1145/3633053.3633057.
- O. Petrovska, L. Clift, and F. Moller, "Generative AI in software development education: Insights from a degree apprenticeship programme," in *Proceedings of the 2023 Conference on United Kingdom & Ireland Computing Education Research*, ser. UKICER'23, Swansea, Wales UK: Association for Computing Machinery, 2023, ISBN: 9798400708763. ODI: 10.1145/3610969.3611132.
- U. Berger, O. Petrovska, and H. Tsuiki, "Prawf: An interactive proof system for program extraction," in *Beyond the Horizon of Computability*, M. Anselmo, G. Della Vedova, F. Manea, and A. Pauly, Eds., Cham: Springer International Publishing, 2020, pp. 137–148, ISBN: 978-3-030-51466-2.
- U. Berger and O. Petrovska, "Optimized program extraction for induction and coinduction," in *Sailing Routes in the World of Computation*, F. Manea, R. G. Miller, and D. Nowotka, Eds., Cham: Springer International Publishing, 2018, pp. 70–80, ISBN: 978-3-319-94418-0.

Other

- O. Petrovska, Course Portfolio on Algorithms and Automata (Apprenticeship), 2024. ODOI: 10.5281/zenodo.14448266.
- O. Petrovska, Enhanced Realizability Interpretation for Program Extraction, 2021. ODOI: 10.23889/suthesis.57831.

Talks

- The Art of Teaching Theory Across Diverse Backgrounds at the British Colloquium for Theoretical Computer Science 2025 (14-16.04.2025, University of Strathclyde, Glasgow, Scotland)
- **GenAI in Education and Research** at the NAIADES (Network for Artificial Intelligence, the Arts, the Digital Economy and Society) Workshop "GenAI: Use and Best Practices" (20.02.2025, Swansea University, Wales)
- Computer Science Outreach in Higher Education: Challenges and Opportunities, co-presented with Megan Venn-Wycherley (08.01.2025, Durham University, England)
- **Developing Students' Critical Skills in the AI-enabled World** at the Advance HE Assessment and Feedback Symposium 2024 (05.11.2024, online)

- **Generative AI and Conversations with Your Students** at the Lunch and Learn Webinar of the Swansea Academy of Learning and Teaching, co-presented with Lee Clift (22.10.2024, online)
- **Student vs AI** at the Learning and Teaching Enhancement Centre (LTEC) Conference "GenAI: Challenges and Solutions" (18.09.2024, Swansea University, Wales)
- **Operational Semantics in Prawf** at the Workshop on Proof and Computation 2022 (01.06.2022, Kloster Schlehdorf, Germany)
- Intuitionistic Fixed Point Logic and Program Extraction at the Workshop on Continuity, Computability, Constructivity 2018 (24-28.09.2018, University of Algarve, Faro, Portugal)
- **Natural Language Proofs for Program Extraction** at the International Workshop on Proof, Computation, Complexity 2017 (26-27.07.2017, University of Göttingen, Germany)
- Natural Language Proof Checking in Predicate Logic at the Workshop on Proofs, Programs, and Verification (19.04.2017, University of Canterbury, Christchurch, New Zealand)

Teaching Experience

2021 - · · · ·	Design and delivery of CSF302 Project Planning and Management
	Design and delivery of CSF206 Algorithms and Automata
	Design and delivery of CSF107 Professional Issues of Software Engineering
	Coordination of final year project modules: CSF301 Project Specification and Development and CSF300 Project Implementation and Dissertation
2021 – 2025	Designed and delivered a range of short courses and workshops for teachers, college students, and general public on AI , Cyber Security , Graphic Design , Web Development , Excel , and other.
2022 - 2023	Delivered CSB100MC Computational Thinking
	Delivered CSB300MC Software Engineering Project Management
	Led tutorials for CS-175 Modelling Computing Systems 2
	Delivered components of CSC301/CSCM01 Software Engineering Project Planning and Management
2021- 2022	Delivered components of CSF399 Human-Computer Interaction
2020 - 2021	Delivered components of CSF207 Computer Security
	Delivered CSF106 Discrete Mathematics for Computer Science
2016 – 2020	Provided support with labs, tutorials and assessment in a variety of CS modules Provided teaching assistance at labs, tutorials and marking for CS-205 Declarative Programming, CSCM13 Critical Systems, CSCM75 Logic in Computer Science, CS-275 Automata Theory and Formal Languages, CS-081 Introduction to Algorithms and Data Structures.

Event Organisation

Sep 2025	CCC 2025 (Continuity, Computability, Constructivity) (upcoming) – Local organiser ¹
March 2025	UK-Ukraine Research Twinning Showcase Event 2025 at the Liverpool University –
	Co-organiser
Jul 2024	CCA 2024 (International Conference on Computability and Complexity in Analysis) –
	Local organiser

¹All conferences/events organised at Swansea University, unless stated otherwise.

Event Organisation (continued)

May 2024	Agda Implementors' Meeting XXXVIII - Local organiser
Sep 2023	UKICER 2023 (UK and Ireland Computing Education Research) – Local organiser
Jul 2022	CiE 2022 (Computability in Europe: Revolutions and Revelations in Computability) – Local organiser
Apr 2022	BCTCS 38 (British Colloquium for Theoretical Computer Science) – Co-chair
Apr 2020	BCTCS 36 online conference – Local organiser
Sep 2019	2nd International Summer School on Proof Theory and Workshop on Proof Theory and its Applications – Local organiser

Languages

Native or bilingual proficiency
Limited working proficiency
Elementary proficiency
Welsh, Mandarin Chinese