

# Olga Petrovska, SFHEA

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## Personal Statement

**Academic leader and Senior Fellow of the HEA with 9 years' teaching experience** and expertise in **computing education research** and assessment design. Currently leading a teaching attainment group at Swansea University, focusing on **AI in Computer Science**. Co-leading an international working group on **GenAI Literacy**. PhD in **Theoretical Computer Science** with a focus on proof theory and program extraction. Current research focuses on **pedagogical innovation in computing education**, exploring GenAI in Higher Education, sustainability, and ethics. Committed to advancing academic excellence and departmental quality.

## Employment

- 2022 – . . . . . 📌 **Head of Final Year** at Computer Science Department, Swansea University, UK
- Under my leadership (Programme Director cover in 2022/23), our Applied Software Engineering programme achieved the best NSS scores in its history: 87% in learning opportunities, 88% in assessment and feedback, 98% in teaching, 100% in academic support
  - Collaborate with external examiners and industry partners to balance academic standards within the programme with practical skills that enhance graduate employability
  - Lead the assessment review process for the whole programme, ensuring rigorous moderation and adherence to academic standards
- 2020 – . . . . . 📌 **Teaching Fellow** at Computer Science Department, Swansea University, UK
- Develop and coordinate various undergraduate modules
  - Research the applications, implications, and potential of GenAI in Higher Education
  - Coordinate and mentor teaching staff, facilitating their ongoing professional development (e.g. in project supervision, assessments, integration of GenAI into teaching, etc.)
- 2020 – 2025 📌 **Technology Consultant and Project Manager** at Ukraïner.net, remote (*part-time*)
- Designed and delivered technical training for Ukraïner's staff and volunteers
  - Successfully managed several multimedia localisation projects
- 2016 – 2020 📌 **Teaching Assistant** at Swansea University, UK (*part-time*)
- Supported teaching across a variety of modules at the Computer Science Department
- 2013 – 2015 📌 **Project Manager / Team Leader** at Wolfestone, Swansea, UK
- Successfully led a team of five project managers in delivering various localisation and translation projects, earning Employee of the Year in 2014

## Positions of Responsibility and Academic Environment

- 2026 – . . . . . 📌 **Co-leader** of the ITiCSE Working Group on Improving CS Students' GenAI Literacy
- 📌 **Program Committee Member** at The UK and Ireland Computing Education Research Conference (UKICER 2026) [RIPPA Track Chair], Innovation and Technology in Computer Science Education (ITiCSE 2026)
- 2025 – . . . . . 📌 **Leader** of the "Embracing AI in Computer Science" Working Group within Swansea University's CoSTA (Computer Science Teaching Attainment Group)
- 2025 – 2026 📌 **Co-leader** of the ITiCSE Working Group on Refactoring Upper Computing Courses to Leverage GenAI

## Positions of Responsibility and Academic Environment (continued)

- 2024 – . . . . .
  - **Program Committee Member** at Human-Centered AI Education & Practice Conference (HCAI-ep'26) [Poster Track Chair], Computing Education Practice (CEP 2026), and Continuity, Computability, Constructivity (CCC 2025)
  - **Reviewer** of HEA fellowship applications under Swansea University's Advance HE-accredited Celebration of Professional Recognition (CoPR) programme
  - **Reviewer** for the several international journals (Frontiers in Education, Information and Software Technology, IEEE Transactions on Learning Technologies, Media and Communication, and IEEE Access) and conferences (SIGCSE TS 2026, CHI'26, OpenEd25, Koli Calling'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
- 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 of Philology, English Language and Literature**  
Chernivtsi National University, Ukraine  
Thesis: *The Functional-Semantic Field of Quantity in John Fowles' Discourse*
- 2002 – 2006
  - **Bachelor of Pedagogy, Pedagogical Education**  
Ternopil National Pedagogical University, Ukraine

## Teaching Experience and Course Design

- 2026 – . . . . .
  - Design and delivery of **CSF1007 Professional Issues**
  - Module support for **CSF1465 Introduction to Data Science**
- 2025 – . . . . .
  - Design and delivery of **CSB120MC Software Testing**
- 2021 – . . . . .
  - Design and delivery of **CSF302 Project Planning and Management**
  - Design and delivery of **CSF206 Algorithms and Automata**
  - Coordination of final year project modules: **CSF301 Project Specification and Development** and **CSF300 Project Implementation and Dissertation**
  - Module support for **CS-170/CS-175 Modelling Computing Systems**
- 2024 – 2025
  - Co-designed **CSF325 Artificial Intelligence**
- 2021 – 2025
  - Designed and delivered **CSF107 Professional Issues of Software Engineering**
  - Designed and delivered a range of short courses and workshops for teachers, college students, and general public on **Artificial Intelligence, Cyber Security, Graphic Design, Web Development, Excel**, and other.
- 2022 – 2023
  - Delivered **CSB100MC Computational Thinking**
  - Delivered **CSB300MC Software Engineering Project Management**
  - Delivered components of **CS-175 Modelling Computing Systems 2**

## Teaching Experience and Course Design (continued)

- 2021– 2022 ■ Delivered components of **CSC301/CSCM01 Software Engineering Project Planning and Management**
- 2020 – 2021 ■ Delivered components of **CSF399 Human-Computer Interaction**
- 2020 – 2021 ■ Delivered components of **CSF207 Computer Security**
- 2020 – 2021 ■ Designed and delivered **CSF106 Discrete Mathematics for Computer Science**
- 2016 – 2020 ■ Provided support with labs, tutorials and assessment in a variety of CS modules: **CS-205 Declarative Programming, CSCM13 Critical System / CSC313 High Integrity Systems, CSCM75 Logic in Computer Science, CS-275 Automata Theory and Formal Languages, CS-o81 Introduction to Algorithms and Data Structures**

## Publications

### Conference Proceedings

- 1 D. J. Bouvier, B. P. Cipriano, R. Glassey, **O. Petrovska**, E. Anderson, A. Birillo, R. Dougherty, R. Pettit, N. Pombo, E. Rahimi, C. Ramakrishnan, A. Steinmaurer, S. Taneja, M. Usman, and A. Vadaparty, “The Rest of the Robots: Generative AI in Post-introductory Computing Education,” in *Proceedings of the 2025 Working Group Reports on Innovation and Technology in Computer Science Education*, ser. ITiCSE-WGR 2025, Netherlands: ACM, 2026, pp. 61–107, ISBN: 9798400721670. [DOI: 10.1145/3760545.3783970](#).
- 2 B. P. Cipriano, **O. Petrovska**, N. Pombo, L. Battestilli, L. Farinetti, R. Glassey, M. Kasinidou, O. Olayinka, A. Shah, A. Steinmaurer, R. Vaidhiyanathan, and J. Weichert, “Towards Improving CS Students’ Generative AI Literacy,” in *Proceedings of the 31st ACM Conference on Innovation and Technology in Computer Science Education, Volume 2 (ITiCSE 2026)*, In press, New York, NY, USA: Association for Computing Machinery, 2026. [DOI: 10.1145/3803401.381205](#).
- 3 **O. Petrovska** and C. Hopkins, “Propaganda or Exposure? A Video-Based Group Assessment Exploring Ethics in a Fictional Technological Society,” in *Proceedings of the 10th Computing Education Practice*, ser. CEP ’26, ACM, 2026, pp. 33–36, ISBN: 9798400721212. [DOI: 10.1145/3772338.3772352](#).
- 4 F. Pantekis and **O. Petrovska**, “Pre-recorded ‘Vivas’ for Assessing Code understanding Amidst AI-Assisted Programming,” in *Proceedings of the 31st ACM Conference on Innovation and Technology in Computer Science Education, Volume 2 (ITiCSE 2026)*, In press, New York, NY, USA: Association for Computing Machinery, 2026. [DOI: 10.1145/3803401.3811969](#).
- 5 J. Roberts and **O. Petrovska**, “Authentic Assessment in Discrete Mathematics: Real-World Modelling Using Logic and Set Theory,” in *Proceedings of the 31st ACM Conference on Innovation and Technology in Computer Science Education, Volume 2 (ITiCSE 2026)*, In press, New York, NY, USA: Association for Computing Machinery, 2026. [DOI: 10.1145/3803401.3811976](#).
- 6 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*, ser. CEP’25, ACM, Jan. 2025, pp. 36–37, ISBN: 9798400711725. [DOI: 10.1145/3702212.3702225](#).
- 7 D. J. Bouvier, B. P. Cipriano, R. Glassey, R. Pettit, E. Anderson, A. Birillo, R. Dougherty, O. Hazzan, **O. Petrovska**, N. Pombo, E. Rahimi, C. Ramakrishnan, A. Steinmaurer, S. Taneja, M. Usman, A. Vadaparty, and G. R. Yeluripati, “GenAI Integration in Upper-Level Computing Courses,” in *Proceedings of the 30th ACM Conference on Innovation and Technology in Computer Science Education V. 2*, ser. ITiCSE 2025, Nijmegen, Netherlands: ACM, Jun. 2025, pp. 691–692, ISBN: 9798400715693. [DOI: 10.1145/3724389.3731276](#).

- 8 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*, ser. CEP’25, ACM, Jan. 2025, pp. 5–8, ISBN: 9798400711725. [DOI: 10.1145/3702212.3702214](#).
- 9 **O. Petrovska**, L. Clift, and F. Pantekis, “Video in Assessments for Soft Skill Development and Evaluation,” in *Proceedings of the 2025 Conference on UK and Ireland Computing Education Research*, ser. UKICER’25, ACM, Sep. 2025, ISBN: 9798400720789. [DOI: 10.1145/3754508.3754531](#).
- 10 **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*, ser. CEP’25, ACM, Jan. 2025, p. 34, ISBN: 9798400711725. [DOI: 10.1145/3702212.3702223](#).
- 11 **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: ACM, Jan. 2024, pp. 37–40, ISBN: 9798400709326. [DOI: 10.1145/3633053.3633057](#).
- 12 **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: ACM, Sep. 2023, ISBN: 9798400708763. [DOI: 10.1145/3610969.3611132](#).
- 13 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. [DOI: 10.1007/978-3-030-51466-2\\_12](#).
- 14 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. [DOI: 10.1007/978-3-319-94418-0\\_7](#).

## Other





- 1 **O. Petrovska**, C. Clarkson, F. Pantekis, M. Venn-Wyherley, and F. Boy, *Modular Generative AI Training to Promote AI Literacy Across the University*, SUSALT 2025 - Enhancing Our Practice: Share - Learn - Create, Swansea, 2025. [DOI: 10.5281/zenodo.18637047](#).
- 2 **O. Petrovska**, *Course Portfolio on Algorithms and Automata (Apprenticeship)*, 2024. [DOI: 10.5281/zenodo.14448266](#).
- 3 **O. Petrovska**, *Enhanced Realizability Interpretation for Program Extraction*, 2021. [DOI: 10.23889/suthesis.57831](#).

## Event Organisation









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|----------|---|--|
| Jun 2026 | 📌 | <b>Logic Colloquium 2026</b> (upcoming) – Local organiser <sup>1</sup>                                   |
| Sep 2025 | 📌 | <b>CCC 2025</b> (Continuity, Computability, Constructivity) – Local organiser                            |
| Mar 2025 | 📌 | <b>UK-Ukraine Research Twinning Showcase Event 2025</b> at the Liverpool University – Co-organiser       |
| Jul 2024 | 📌 | <b>CCA 2024</b> (International Conference on Computability and Complexity in Analysis) – Local organiser |
| May 2024 | 📌 | <b>Agda Implementors’ Meeting XXXVIII</b> – Local organiser  |
| Sep 2023 | 📌 | <b>UKICER 2023</b> (UK and Ireland Computing Education Research) – Local organiser                       |

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

## Event Organisation (continued)

- 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

## CPD Courses and Certifications

- 2025  **Personal Development Course for External Examiners**, Advance HE
-  **Level 4 NVQ Diploma in Management**, ILM
-  **Project Management Professional Certificate**, Google
-  **Sustainability in the Digital Age: Energy-Efficient Software Development**, openHPI
-  **Sustainability in the Digital Age: Environmental Impacts of AI Systems**, openHPI
- 2024  **AI in Education: Leveraging ChatGPT for Teaching**, University of Pennsylvania
- 2023  **Data Science Bootcamp**, openHPI
- 2022  **Sustainable Software Engineering**, openHPI

## Selected Talks

- 1 GenAI for Researchers: Capabilities, Risks, and Responsible Use** at a workshop within the NextGen AI Bootcamp (20.02.2026, Swansea University)
- 2 The Use of Video in Assessments for Soft Skill Development and Evaluation** at the University of Nottingham (26.11.2025, online)
- 3 Smile! You're Being (Video) Assessed** at the Teaching Hour of the Computer Science Education Group, University of Edinburgh (24.11.2025, online)
- 4 Modular Generative AI Training to Promote AI Literacy Across the University** at the Swansea University annual Learning and Teaching Conference SUSALT 2025 - Enhancing Our Practice: Share - Learn - Create | co-presented with Filippos Pantekis (10.07.2025, Swansea University, Wales)
- 5 The Art of Teaching Theory Across Diverse Backgrounds** at the British Colloquium for Theoretical Computer Science 2025 (14-16.04.2025, University of Strathclyde, Scotland)
- 6 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)
- 7 Computer Science Outreach in Higher Education: Challenges and Opportunities** | co-presented with Megan Venn-Wycherley (08.01.2025, Durham University, England)
- 8 Developing Students' Critical Skills in the AI-enabled World** at the Advance HE Assessment and Feedback Symposium 2024 (05.11.2024, online)
- 9 How are students using Generative Artificial Intelligence?** (01.11.2024, "Pinch of SALT" podcast)
- 10 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)
- 11 Student vs AI** at the Learning and Teaching Enhancement Centre (LTEC) Conference "GenAI: Challenges and Solutions" (18.09.2024, Swansea University, Wales)

- 12 **Operational Semantics in Prawf** at the Workshop on Proof and Computation 2022 (01.06.2022, Kloster Schlehndorf, Germany)
- 13 **Intuitionistic Fixed Point Logic and Program Extraction** at the Workshop on Continuity, Computability, Constructivity 2018 (24-28.09.2018, University of Algarve, Faro, Portugal)
- 14 **Natural Language Proofs for Program Extraction** at the International Workshop on Proof, Computation, Complexity 2017 (26-27.07.2017, University of Göttingen, Germany)
- 15 **Natural Language Proof Checking in Predicate Logic** at the Workshop on Proofs, Programs, and Verification (19.04.2017, University of Canterbury, Christchurch, New Zealand)

## Secondments and Residences

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- 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)

## Languages

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- Native or bilingual proficiency ▀ English, Ukrainian, Slovak, Russian
- Limited working proficiency ▀ German, Polish
- Elementary proficiency ▀ Welsh, Mandarin Chinese

## References

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### Prof Faron Moller

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