

Profir-Petru Pârţachi

E-Mail: [me\[at\]partachi\[dot\]com](mailto:me[at]partachi[dot]com)

Web: partachi.com

LinkedIn: pp-partachi

Education	Ph.D. in Computer Science	September 2016 – December 2020
	<i>Centre for Research on Evolution, Search and Testing</i>	<i>University College London, Gower Street, London WC1E 6BT</i>
	Ph.D. Thesis: 'Improving Software Project Health Using Machine Learning'	
	Supervised by <i>Prof. Earl T. Barr</i> (e.barr[at]ucl[dot]ac[dot]uk)	
	Computer Science Tripos	September 2013 – July 2016
Work Experience	<i>King's College, University of Cambridge</i>	<i>Cambridge, United Kingdom</i>
	BA in Computer Science	
	BA Thesis: 'Deck building in Hearthstone Using a Genetic Algorithm.'	
	Assistant Professor	May 2025 – Present
	<i>Institute of Science Tokyo</i>	<i>Midori-ku, Kanagawa, Japan</i>
	Research and Teaching position at the School of Computing, Kobayashi Laboratory	
	Post-doctoral Researcher	April 2022 – April 2025
	<i>National Institute of Informatics</i>	<i>Chiyoda-ku, Tokyo, Japan</i>
	Research into the naturalness properties of structured representations of source code.	
	Supervised by Assoc. Prof. Mahito Sugiyama	
	Freelance Researcher	April 2021 – April 2022
	<i>National Institute of Informatics</i>	<i>Chişinău, Republic of Moldova</i>
	Research into the naturalness properties of structured representations of source code.	
	Consulting for Assoc. Prof. Mahito Sugiyama	
	Research Internship	October 2018 – April 2019
	<i>National Institute of Informatics</i>	<i>Chiyoda-ku, Tokyo, Japan</i>
	Worked on the efficient processing of spatiotemporal data for anomaly detection using Graph Kernels.	
	Supervised by Assoc. Prof. Mahito Sugiyama	
	Hardware/Software Engineer Intern	June 2016 – September 2016
	<i>Computer Laboratory, University of Cambridge</i>	<i>Cambridge, United Kingdom</i>
	Worked within the lowRISC team to provide:	
	<ul style="list-style-type: none">• Hardware implementations of DCT, IDCT, and colour space conversions for MPEG2 as AXI-stream accelerators.• Hardware logic to interface AXI-stream accelerators with the lowRISC CPU chip.	
	Software Developer Intern	June 2015 – October 2015
	<i>Amazon Instant Video</i>	<i>London, United Kingdom</i>
	Worked on providing an auditing infrastructure by:	
	<ul style="list-style-type: none">• Writing a plug-in to wrap calls to backend systems to log calls and responses.• Storing intercepted calls and pre-processing stored data in Amazon Redshift for auditing reports.	
Publications		
	[1] Pârţachi, P.-P., & Sugiyama, M., Bringing Structure to Naturalness: On the Naturalness of ASTs . In <i>Proceedings of the 2024 IEEE/ACM 46th International Conference on Software Engineering (ICSE'24): Companion Proceedings</i> , ACM., April, 2024.	
	[2] Pârţachi, P.-P., White, D. R., & Barr, E. T., Aide-mémoire: Improving a Project's Collective Memory via Pull Request-Issue Links . In <i>ACM Transactions on Software Engineering and Methodology</i> , ACM., May, 2022. https://github.com/PPPI/a-m	
Publications	[3] Pârţachi, P.-P., Dash, S. K., Allamanis, M., & Barr, E. T., Flexeme: Untangling Commits Using Lexical Flows . In <i>28th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, (ESEC/FSE 2020)</i> . Sacramento, California, United States; ACM., November, 2020; https://partachi.com/Flexeme	

- [4] Pârţachi, P.-P., Treude, C., Dash, S. K., & Barr, E. T., **POSIT: Simultaneously Tagging Natural and Programming Languages**. In *42nd International Conference on Software Engineering (ICSE '20)*. Seoul, Republic of Korea; ACM., July 2020; <https://partachi.com/POSIT>
- [5] Pârţachi, P.-P. **Improving Software Project Health Using Machine Learning**. PhD diss., UCL (University College London), 2020.

Teaching Experience

Data Mining @ SOKENDAI (NII)	October 2023 — January 2024
<i>Teaching Assistant</i>	<i>SOKENDAI/National Institute of Informatics</i>
Leading the introduction to Graph Neural Networks lecture	
COMPM203 Verification and Validation	January 2018 – April 2018,
	January 2020 – July 2020
<i>Teaching Assistant</i>	<i>University College London</i>
Coursework writing and marking, leading problem-based workshops, assisting exam setting, and exam marking	
COMP103P Applied Software Development	January 2018 – April 2018
<i>Teaching Assistant</i>	<i>University College London</i>
Laboratory Supervisor and Group Project Supervisor	
COMP213P Systems Engineering	October 2017 – April 2018
<i>Teaching Assistant</i>	<i>University College London</i>
Group Project Supervisor	

Awards

Cambridge Commonwealth Trust 2013-2014
For the purpose of BA Computer Science Tripos at King's College, Cambridge

HMC Reduced Fee Scheme 2012
For the purpose of attending Seaford College for UK A-levels

Reviews

Conferences

- Program Committee member for: Research Track at **ICSE 2026**, Research Track at **FSE 2025**, Research and Experience at **CAIN 2025, 2024**, Artefact Track at **ICSE 2024**, **InteNSE 2023**, Research Track at **SANER 2023, 2022**, Mining Challenge at **MSR 2021**.
- Reviewing for: **AAAI 2025, ICML 2024, ICLR 2025, 2024, NeurIPS 2025, 2023**.
- Sub-reviewing for: **ASE 2022, ISSTA 2021, SANER 2021, ICSE 2021**, Registered Studies at **ICSME 2020, ASE 2020, MSR 2020, FSE 2019, ISSTA 2019, ASE 2018, ECOOP 2018, ISSTA 2018**, and **MSR 2017**.

Journals

- Reviewing for: **TOSEM 2023, 2022, JSS 2022, 2021, EMSE 2021**, and **MTAP 2020**.
- Sub-reviewing for: **EAAI 2020**, and **TSE 2017**

Technology Skills

Programming Languages: Python, Java, Haskell.
Theorem Proof Assistants: Coq.

Language Skills

Native: Romanian.
Fluent: English, Russian.
Intermediate: Czech, German.
Beginner: Japanese.