

Profir-Petru Pârțachi

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Education	PhD in Computer Science <i>Centre for Research on Evolution, Search and Testing</i> PhD Thesis: 'Improving Software Project Health Using Machine Learning' Supervised by Prof. Earl T. Barr (e.barr@ucl.ac.uk)	September 2016 – December 2020 <i>University College London, Gower Street, London WC1E 6BT</i>
	Computer Science Tripos <i>King's College, University of Cambridge</i> BA in Computer Science BA Thesis: 'Deck building in Hearthstone Using a Genetic Algorithm.'	September 2013 – July 2016 <i>Cambridge, United Kingdom</i>
Work Experience	Post-doctoral Researcher <i>National Institute of Informatics</i> Research into the naturalness properties of structured representations of source-code. Supervised by Assoc. Prof. Mahito Sugiyama	April 2022 – now <i>Chiyoda-ku, Tokyo, Japan</i>
	Freelance Researcher <i>National Institute of Informatics</i> Research into the naturalness properties of structured representations of source-code. Consulting for Assoc. Prof. Mahito Sugiyama	April 2021 – April 2022 <i>Chișinău, Republic of Moldova</i>
	Research Internship <i>National Institute of Informatics</i> Worked on the efficient processing of spatiotemporal data for anomaly detection using Graph Kernels. Supervised by Assoc. Prof. Mahito Sugiyama	October 2018 – April 2019 <i>Chiyoda-ku, Tokyo, Japan</i>
	Hardware/Software Engineer Intern <i>Computer Laboratory, University of Cambridge</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.	June 2016 – September 2016 <i>Cambridge, United Kingdom</i>
	Software Developer Intern <i>Amazon Instant Video</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.	June 2015 – October 2015 <i>London, United Kingdom</i>
Publications	<ul style="list-style-type: none">[1] Pârțachi, 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[2] Pârțachi, 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[3] Pârțachi, P.-P., Treude, C., Dash, S. K., & Barr, E. T., POSIT: Simultaneously Tagging Natural and Programming Languages. In <i>42nd International Conference</i>	

on Software Engineering (ICSE '20). Seoul, Republic of Korea; ACM., July 2020;
<https://partachi.com/POSIT>

- [4] Pârţachi, P.-P.. **Improving Software Project Health Using Machine Learning**. PhD diss., UCL (University College London), 2020.

Teaching Experience	COMPM203 Verification and Validation <i>Teaching Assistant</i> Leading problem based workshops, assisting exam setting, and exam marking	January 2020 – July 2020 <i>University College London</i>
	COMP103P Applied Software Development <i>Teaching Assistant</i> Laboratory Supervisor and Group Project Supervisor	January 2018 – April 2018 <i>University College London</i>
	COMPM203 Verification and Validation <i>Teaching Assistant</i> Coursework writing and marking	January 2018 – April 2018 <i>University College London</i>
	COMP213P Systems Engineering <i>Teaching Assistant</i> Group Project Supervisor	October 2017 – April 2018 <i>University College London</i>

Awards	Cambridge Commonwealth Trust 2013-2014 <i>For the purpose of BA Computer Science Tripos at King's College, Cambridge</i>
	HMC Reduced Fee Scheme 2012 <i>For the purpose of attending Seaford College for UK A-levels</i>

Reviews	Conferences <ul style="list-style-type: none">– Program Committee member for the Research Track at SANER 2022– Sub-reviewing for ISSTA 2021– Program Committee member for the Mining Challenge at MSR 2021– Sub-reviewing for SANER 2021– Sub-reviewing for ICSE 2021– Sub-reviewing Registered Studies for ICSME 2020– Sub-reviewing for ASE 2020– Sub-reviewing for MSR 2020– Sub-reviewing for FSE 2019– Sub-reviewing for ISSTA 2019– Sub-reviewing for ASE 2018– Sub-reviewing for ECOOP 2018– Sub-reviewing for ISSTA 2018– Sub-reviewing for MSR 2017
	Journals <ul style="list-style-type: none">– Reviewing for TOSEM 2022– Reviewing for JSS 2022– Reviewing for JSS 2021– Reviewing for EMSE 2021– Reviewing for MTAP 2020– Sub-reviewing for EAAI 2020– Sub-reviewing for TSE 2017

**Technology
Skills**

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

**Language
Skills**

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