

## Profir-Petru Pârțachi

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Education	<b>PhD in Computer Science</b>	<b>September 2016 – December 2020</b>
	<i>Centre for Research on Evolution, Search and Testing</i>	<i>University College London, Gower Street, London WC1E 6BT</i>
	<b>PhD Thesis:</b> 'Improving Software Project Health Using Machine Learning' Supervised by Prof. Earl T. Barr (e.barr@ucl.ac.uk)	
	<b>Computer Science Tripos</b>	<b>September 2013 – July 2016</b>
	<i>King's College, University of Cambridge</i>	<i>Cambridge, United Kingdom</i>
	BA in Computer Science <b>BA Thesis:</b> 'Deck building in Hearthstone Using a Genetic Algorithm.'	
Work Experience	<b>Post-doctoral Researcher</b>	<b>April 2022 – now</b>
	<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	
	<b>Freelance Researcher</b>	<b>April 2021 – April 2022</b>
	<i>National Institute of Informatics</i>	<i>Chișinău, Republic of Moldova</i>
	Research into the naturalness properties of structured representations of source-code. Consulting for Assoc. Prof. Mahito Sugiyama	
	<b>Research Internship</b>	<b>October 2018 – April 2019</b>
	<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	
	<b>Hardware/Software Engineer Intern</b>	<b>June 2016 – September 2016</b>
	<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"><li>• Hardware implementations of DCT, IDCT and colour space conversions for MPEG2 as AXI-stream accelerators.</li><li>• Hardware logic to interface AXI-stream accelerators with the lowRISC CPU chip.</li></ul>	
	<b>Software Developer Intern</b>	<b>June 2015 – October 2015</b>
	<i>Amazon Instant Video</i>	<i>London, United Kingdom</i>
	Worked on providing an auditing infrastructure by:	
	<ul style="list-style-type: none"><li>• Writing a plug-in to wrap calls to backend systems to log calls and responses.</li><li>• Storing intercepted calls and pre-processing stored data in Amazon Redshift for auditing reports.</li></ul>	
Publications	[1] Pârțachi, P.-P., Dash, S. K., Allamanis, M., & Barr, E. T., <b>Flexeme: Untangling Com-mits Using Lexical Flows</b> . 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; <a href="https://partachi.com/Flexeme">https://partachi.com/Flexeme</a>	
	[2] Pârțachi, P.-P., Treude, C., Dash, S. K., & Barr, E. T., <b>POSIT: Simultaneously Tag-ging Natural and Programming Languages</b> . In <i>42nd International Conference on Software Engineering (ICSE '20)</i> . Seoul, Republic of Korea; ACM., July 2020; <a href="https://partachi.com/POSIT">https://partachi.com/POSIT</a>	

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

## Teaching Experience

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

## 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 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

- 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.