

# Marija Selakovic

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CONTACT INFORMATION	Mornwegstrasse 32, Room 4.3.08 64295 Darmstadt, Germany m.selakovic89@gmail.com marija.skyresource.com
RESEARCH INTERESTS	Program analysis of dynamic languages, performance profiling, program refactorings
EDUCATION	<b>VU University Amsterdam and University of L'Aquila</b> , The Netherlands, Italy M.S., Computer Science, August 2014 <ul style="list-style-type: none"><li>• Topic: <i>Application of MDE principles in the JEE design and development</i></li><li>• Advisors:<ul style="list-style-type: none"><li>• Patricia Lago, VU Amsterdam</li><li>• Lara Ziosi, IBM Netherlands</li><li>• Henry Muccini, University of L'Aquila</li></ul></li></ul> <b>University of Belgrade</b> , Serbia B.S., Information Systems and Technology, June 2012
RESEARCH EXPERIENCE	<b>Research Assistant</b> October 2014 to present Computer Science Department, TU Darmstadt Topic: <i>Performance analysis of JavaScript applications</i> Supervisor: Prof. Dr. Michael Pradel <b>Research Intern</b> June 2018 to September 2018 Microsoft Research Topic: <i>Program analysis to find accessibility issues in web applications</i> <b>Research Intern</b> May 2017 to August 2017 Microsoft Research Topic: <i>Program analysis to find performance optimizations in Big data jobs</i> <b>Research Assistant</b> October 2013 to June 2014 Network Institute, VU Amsterdam Supervisors: Damian Andrew Tamburri, Ph.D and Zuzana Sasovova, Ph.D
INDUSTRY EXPERIENCE	<b>Software Engineering Intern</b> February 2014 to July 2014 IBM, The Netherlands Project: <i>Application of Model Driven Engineering in JEE application development</i>
VOLUNTEERING EXPERIENCE	<b>Student Volunteer</b> International Conference On Software Engineering Florence, Italy May 2015 Symposium on the Foundations of Software Engineering Paderborn, Germany September 2017
REFEREED JOURNAL PUBLICATIONS	1. Esben Andreasen, Liang Gong, Andres Moller, Michael Pradel, <b>Marija Selakovic</b> , Koushik Sen, Cristian-Alexandru Staicu "Survey of Dynamic Analysis and Test Generation for JavaScript" 2017, <i>ACM Computing Surveys</i> .
CONFERENCE PUBLICATIONS	1. <b>Marija Selakovic</b> , Michael Pradel, Rezwana Karim Nawrin, Frank Tip "Test Generation for Higher-Order Functions in Dynamic Languages" November 2018, <i>Object-Oriented Programming, Systems, Languages &amp; Applications Conference</i>

	<ol style="list-style-type: none"> <li>2. <b>Marija Selakovic</b>, Michael Barnett, Madan Musuvathi and Todd Mytkowicz “Cross-Language Optimizations in Big Data Systems: A Case Study of SCOPE ” May 2018, <i>International Conference On Software Engineering (SEIP)</i></li> <li>3. <b>Marija Selakovic</b>, Thomas Glaser, Michael Pradel “An Actionable Performance Profiler for Optimizing the Order of Evaluations” July 2017, <i>International Symposium on Software Testing and Analysis</i></li> <li>4. <b>Marija Selakovic</b>, Michael Pradel “Performance Issues and Optimizations in JavaScript: An Empirical Study” May 2016, <i>International Conference On Software Engineering</i></li> <li>5. <b>Marija Selakovic</b>, Damian Andrew Tamburri, Zuzana Sasovova, Melvin Matthesius “Leveraging Expertise Diversity” April 2014, <i>Conference on Organisational Learning Knowledge and Capabilities</i></li> </ol>
OTHER PUBLICATIONS	<ol style="list-style-type: none"> <li>1. <b>Marija Selakovic</b>, Michael Pradel “Automatically Fixing Real-World JavaScript Performance Bugs” May 2015, <i>International Conference On Software Engineering - Poster Track</i></li> <li>2. <b>Marija Selakovic</b> “Accelerate the design and development of Java Enterprise Applications” March 2015, <i>IBM DeveloperWorks</i></li> </ol>
AWARDS	<ul style="list-style-type: none"> <li>• 2016 ACM-W Scholarship Award for Attendance at Research Conferences</li> <li>• 2013 Ministry of Education, Science and Technological Development of Republic of Serbia, Fund for Young Talents ”Dositeja” <i>Scholarship for best postgraduate students enrolled in leading world universities</i></li> <li>• 2012 Erasmus Mundus, EUROWEB project <i>Fully funded scholarship financed by European Commission for a period of 20 months</i></li> <li>• 2012 Ministry of Education, Science and Technological Development of Republic of Serbia <i>Scholarship for the best undergraduate students studying in Serbia</i></li> </ul>
TALKS	<ul style="list-style-type: none"> <li>• <i>Actionable Performance Profiling for JavaScript</i>, Dagstuhl seminar on Genetic Improvement of Software, January 2018</li> <li>• <i>Automated techniques for fixing performance issues in JavaScript applications</i>, Dagstuhl seminar on Automated Program Repair, January 2017</li> <li>• <i>Performance issues and optimizations in JavaScript</i>, EnterJS, June 2016</li> <li>• <i>Lets make JavaScript programs faster</i>, JSConf, September 2015</li> </ul>
TEACHING EXPERIENCE	<p>Thesis Advisor <span style="float: right;">Summer 2013</span></p> <p><b>Master thesis:</b> <i>Automatic Generation of Performance Benchmarks for JavaScript Libraries</i>, Sebastian Ruhleder, 2017</p> <p><b>Bachelor thesis:</b> <i>A Dynamic Analysis to Help Refactoring Complex Conditions for Improved Performance</i> Thomas Glaser, 2015</p> <p>Teaching Assistant <span style="float: right;">Falls 2015–17</span></p> <p>Course: Program Testing and Analysis Instructor: Michael Pradel, Ph.D TU Darmstadt</p>
REFERENCES	Available upon request