

# Jan Stolarek

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Polish citizen. Speaks English (fluent).

## Education

2012	<b>PhD</b> in Computer Science, Lodz University of Technology (Poland) Thesis: <i>Orthogonal wavelet synthesis based on signal processing outcome.</i>
2008	<b>MSc</b> in Computer Science, Lodz University of Technology (Poland) Thesis: <i>User identification based on fingerprint analysis.</i>

## Academic career

2016–to date	<b>Research Associate</b> at Laboratory for Foundations of Computer Science, University of Edinburgh, UK Responsibilities: <i>research work on a project „Skye: A programming language bridging theory and practice for scientific data curation”.</i>
2012–2016	<b>Lecturer</b> at the Institute of Information Technology, Lodz University of Technology, Poland Responsibilities: <i>research on functional programming and compiler construction; teaching undergraduate and postgraduate courses.</i>
2008–2012	<b>Research Assistant</b> at the Institute of Information Technology, Lodz University of Technology, Poland Responsibilities: <i>research on discrete wavelet transforms, digital signal watermarking and image quality assessment; teaching undergraduate and postgraduate courses.</i>

## Peer-reviewed papers

2015	J. Stolarek, S. Peyton Jones, and R. A. Eisenberg. Injective Type Families for Haskell. <i>ACM SIGPLAN Notices</i> , 50(12):118–128, December 2015
2014	R. A. Eisenberg and J. Stolarek. Promoting functions to type families in Haskell. <i>ACM SIGPLAN Notices</i> , 49(12):95–106, December 2014
2012	J. Stolarek and P. Lipiński. Improving watermark resistance against removal attacks using orthogonal wavelet adaptation. In <i>Proceedings of the 38th Conference on Current Trends in Theory and Practice of Computer Science</i> , volume 7147 of <i>Lecture Notes in Computer Science</i> , pages 588–599. Springer, 2012
	J. Stolarek. Adaptive wavelet synthesis for improving digital image watermarking. In P. Lipiński and K. Świrski, editors, <i>Towards Modern Collaborative Knowledge Sharing Systems</i> , pages 133–144. Springer, 2012
2011	J. Stolarek. On properties of a lattice structure for a wavelet filter bank implementation: Part II. <i>Journal of Applied Computer Science</i> , 19(2):125–139, December 2011
	J. Stolarek. On properties of a lattice structure for a wavelet filter bank implementation: Part I. <i>Journal of Applied Computer Science</i> , 19(1):85–116, June 2011
	P. Lipiński and J. Stolarek. Digital watermarking enhancement using wavelet filter parametrization. In A. Dobnikar, U. Lotrič, and B. Šter, editors, <i>Adaptive and Natural Computing Algorithms (10th ICANNGA, 2011)</i> , volume 1, pages 330–339, 2011

	J. Stolarek. Adaptive synthesis of a wavelet transform using fast neural network. <i>Bulletin of the Polish Academy of Sciences: Technical Sciences</i> , 59(1):9–13, March 2011
2010	J. Stolarek. Improving energy compaction of a wavelet transform using genetic algorithm and fast neural network. <i>Archives of Control Sciences</i> , 20(4):417–433, December 2010
	J. Stolarek and P. Lipiński. Improving digital watermarking fidelity using fast neural network for adaptive wavelet synthesis. <i>Journal of Applied Computer Science</i> , 18(1):61–74, 2010
2009	J. Stolarek and M. Yatsymirskyy. Fast neural network for synthesis and implementation of orthogonal wavelet transform. In <i>Image Processing &amp; Communications Challenges</i> , pages 87–94. AOW EXIT, 2009

Clicking the title accesses the full text of the paper.

## Other publications

2012–to date	<a href="http://lambda.jstolarek.com">http://lambda.jstolarek.com</a> , blog about functional programming
2013	J. Stolarek. Verifying weight biased leftist heaps using dependent types. Self-published online, 2013
2012	J. Stolarek. Understanding basic Haskell error messages. <i>The Monad.Reader</i> , Issue 20:21–41, 2012

Additionally, 5 non-refereed articles presented at regional and international conferences. Full list available at <http://ics.p.lodz.pl/~stolarek/en:research:publications>

## Grants, awards, scholarships and research internships

2014	Research grant for young scientists from the Dean of the Faculty of Technical Physics, Information Technology and Applied Mathematics, Lodz University of Technology (ca. €1600)
2013	Internship at Microsoft Research Cambridge, UK. Research and development work on Glasgow Haskell Compiler
2011	Research grant for young scientists from the Dean of the Faculty of Technical Physics, Information Technology and Applied Mathematics, Lodz University of Technology, awarded to the best PhD researcher at Institute of Information Technology (ca. €2750)
2009	IEEE Best Paper Award Polish Section ED for <i>Synthesis of a wavelet transform using neural network</i> presented during the XI International PhD Workshop OWD 2009 Best Presentation distinction at the international conference ISDMCI 2009 for <i>Realization of Daubechies transform using lattice structure</i>
2003-2008	Lodz University of Technology scholarship for best students (ca. €1650 p.a.)