# Anton Beloglazov, PhD

 $Software\ Engineer\ and\ Researcher,\ IBM\ Research-\ Australia$ 

CONTACTS	$anton.beloglazov@gmail.com \\ http://beloglazov.info$	+61-45-105-23-58 Melbourne, Australia
Interests	<ul> <li>Distributed systems</li> <li>Concurrency and scalability</li> <li>Platforms and infrastructure</li> <li>Web services</li> <li>Functional programming</li> <li>Algorithm design and analysis</li> </ul>	
SKILLS	Java, Scala, Python, Haskell, SQL, TypeScript, JavaScript, Bash	
Education	Ph.D. in Computer Science The University of Melbourne, Australia Energy-Efficient Management of Virtual Machines in Data Center Supervisor: Prof. Rajkumar Buyya  M.Sc. in Computer Science and Software Engineering Novosibirsk State Technical University, Russia	
	B.Sc. in Computer Science and Software Engineering Novosibirsk State Technical University, Russia	09/2002 - 06/2006
Awards	<ul> <li>Third-prize winner of Startup Weekend Melbourne</li> <li>First-prize winner of IBM MobileFirst Hackathon</li> <li>International Postgraduate Research Scholarship (IPRS)</li> <li>Melbourne International Research Scholarship (MIRS)</li> <li>Microsoft Research and EII Fellowship for 2011 EII PhD School</li> <li>Russian Federation Academic Scholarship</li> </ul>	$\begin{array}{c} 06/2014 \\ 04/2014 \\ 03/2009 - 03/2013 \\ 03/2009 - 08/2012 \\ 09/2011 \\ 02/2003 - 06/2008 \end{array}$
EXPERIENCE	Researcher at IBM Research, Australia	02/2013 - Present
	Modeling and simulation of bushfire evacuation scenarios, including fire simulation, evacuee behavior modeling, agent-based traffic simulation, post-simulation analysis, and building a distributed system implementing the modeling workflow.	
	Research Intern at IBM Research, Australia	06/2011 - 02/2013
	Microscopic discrete-event traffic simulation applying car-following models, such as the Intelligent Driver Model (6-8 hours per week).	
	Research Intern at IBM Research, India	09/2010 - 12/2010
	Applying the software product line methodology to improve productivity in design and development of IT service delivery simulation models.	
	Web Developer at XIAG AG, Russia	08/2008 - 02/2009
	Web Developer at SB RAS Publishing, Russia	02/2007 - 08/2008
	Web Developer at Softomate LLC, Russia	06/2004 - 09/2004
	Web Developer at WebMotion, Russia	06/2003 - 09/2003
	Web Developer, Freelance	06/2002 - 08/2008

#### OPEN SOURCE

#### CouchDB-Scala

Purely functional Scala client for CouchDB.

# OpenStack Neat

Python framework for dynamic consolidation of virtual machines with OpenStack.

## OpenStack Deployment Guide

Guide and scripts for deploying OpenStack on CentOS with KVM and GlusterFS.

#### CloudSim

Java framework for modeling and simulation of Cloud computing systems.

# Google Scholar Citations for Zotero

Zotero plugin for fetching citations from Google Scholar (> 13,000 users).

## Favorite URL Opener

Google Chrome extension for opening multiple saved URLs with one click.

# hamcrest-querydsl

Java library of Hamcrest matchers for Querydsl.

#### vim-online-thesaurus

Vim plugin for looking up words in an online thesaurus.

## vim-textobj-quotes

Vim plugin providing text objects for the closest pairs of quotes of any type.

#### vim-textobj-punctuation

Vim plugin providing text objects for text between the cursor and punctuation.

## clj-genetic

Clojure library for implementing real-coded genetic algorithms.

# github.com/beloglazov

More projects.

# Publications (3k citations)

#### **Book chapters**

 Anton Beloglazov, Rajkumar Buyya, Young Choon Lee, and Albert Zomaya, "A Taxonomy and Survey of Energy-Efficient Data Centers and Cloud Computing Systems," Advances in Computers, Marvin V. Zelkowitz (editor), Volume 82, Pages: 47-111, ISBN: 978-0-12-385512-1, Academic Press, USA, 2011.

# Journal publications (7)

- 2. **Anton Beloglazov**, Dipyaman Banerjee, Alan Hartman, and Rajkumar Buyya, "Improving Productivity in Design and Development of IT Service Delivery Simulation Models," *Journal of Service Research (JSR)*, Sage Publications, USA, 2014 (in press, accepted on 27/05/2014).
- 3. Anton Beloglazov and Rajkumar Buyya, "OpenStack Neat: A Framework for Dynamic and Energy-Efficient Consolidation of Virtual Machines in OpenStack Clouds," Concurrency and Computation: Practice and Experience (CCPE), John Wiley & Sons, Ltd, USA, 2014 (in press, accepted on 19/05/2014).

- 4. Anton Beloglazov and Rajkumar Buyya, "Managing Overloaded Hosts for Dynamic Consolidation of Virtual Machines in Cloud Data Centers Under Quality of Service Constraints," *IEEE Transactions on Parallel and Distributed Systems* (TPDS), Volume 24, Issue 7, Pages 1366-1379, IEEE CS Press, USA, 2013.
- 5. Anton Beloglazov and Rajkumar Buyya, "Optimal Online Deterministic Algorithms and Adaptive Heuristics for Energy and Performance Efficient Dynamic Consolidation of Virtual Machines in Cloud Data Centers," Concurrency and Computation: Practice and Experience (CCPE), Volume 24, Issue 13, Pages: 1397-1420, John Wiley & Sons, Ltd, USA, 2012.
- 6. Anton Beloglazov, Jemal Abawajy, and Rajkumar Buyya, "Energy-Aware Resource Allocation Heuristics for Efficient Management of Data Centers for Cloud Computing," The International Journal of Grid Computing and eScience, Future Generation Computer Systems (FGCS), Volume 28, Issue 5, Pages: 755-768, Elsevier Science, The Netherlands, 2012.
- Kyong Hoon Kim, Anton Beloglazov, and Rajkumar Buyya, "Power-Aware Provisioning of Virtual Machines for Real-time Cloud Services," Concurrency and Computation: Practice and Experience (CCPE), Volume 23, Issue 13, Pages: 1492-1505, John Wiley & Sons, Ltd, USA, 2011.
- 8. Rodrigo N. Calheiros, Rajiv Ranjan, **Anton Beloglazov**, Cesar A. F. De Rose, and Rajkumar Buyya, "CloudSim: A Toolkit for Modeling and Simulation of Cloud Computing Environments and Evaluation of Resource Provisioning Algorithms," Software: Practice and Experience (SPE), Volume 41, Number 1, Pages: 23-50, John Wiley & Sons, Ltd, USA, 2011.

#### Conference publications (selected)

- 9. Anton Beloglazov and Rajkumar Buyya, "Adaptive Threshold-Based Approach for Energy-Efficient Consolidation of Virtual Machines in Cloud Data Centers," Proceedings of the 8th International Workshop on Middleware for Grids, Clouds and e-Science (MGC 2010), Bangalore, India: ACM, November 29 December 3, 2010.
- 10. Anton Beloglazov and Rajkumar Buyya, "Energy Efficient Resource Management in Virtualized Cloud Data Centers," IEEE TCSC Doctoral Symposium, Proceedings of the 10th IEEE/ACM International Symposium on Cluster, Cloud, and Grid Computing (CCGrid 2010), Melbourne, Australia, May 17-20, 2010.

#### Technical reports

11. **Anton Beloglazov**, Sareh Fotuhi Piraghaj, Mohammed Alrokayan, and Rajkumar Buyya, "Deploying OpenStack on CentOS Using the KVM Hypervisor and GlusterFS Distributed File System," *Technical Report CLOUDS-TR-2012-3*, Cloud Computing and Distributed Systems Laboratory, The University of Melbourne, August 14, 2012.

Languages

English - fluent

Russian - native speaker

REFERENCES

Available upon request