

Zeljko Obrenovic

Curriculum Vitae

Contact

Email: obren@acm.org
Homepage: <https://obren.info/>
LinkedIn: <https://www.linkedin.com/in/zeljkoobrenovic/>
Twitter: https://twitter.com/zeljko_obren

Education

- 2004 **Ph.D. in Computer Science**, School of Electrical Engineering, University of Belgrade, Belgrade, Serbia and Montenegro.
- 2002 **M.S. in Computer Science**, School of Electrical Engineering, University of Belgrade, Belgrade. GPA: 10.00/10.00.
- 1999 **B.S. in Computer Science**, Military Technical Academy, University of Belgrade, Belgrade.

Professional Experience

- Jan 2016 – **Principal Consultant, Software Improvement Group (<http://www.sig.eu>), Amsterdam**
- *Guiding architecture and implementation of IT systems based on software analytics. Helping clients to architect and build software systems that are usable, secure, robust and easy to maintain.*
 - *Internally, I am leading development and research of new software products and analytics methods for automatic analysis of systems' quality aspects, including, security (threat modeling, code reviews, architecture reviews), maintainability (static code analysis), performance, reliability (architecture and code reviews), and usability.*
- May 2015 – **Board Member, IEEE Computer Society (computer.org)**
- **IEEE Software** - Advisory Board Member (2015-)
 - **IEEE Computer** - Editorial Board Member (2017-)
 - **IEEE IT Professional** - Editorial Board Member (2017-)

Past positions:

Jun 2015 –
Dec 2016

**Head of Software Measurement and Analysis (full time),
Software Improvement Group (<http://www.sig.eu>), Amsterdam**

- *Leading the software measurement and analysis group*
- *Innovation of the SIG measurement models based on the ISO 25010 standard (maintainability, security, performance reliability, usability)*
- *Development of new tools for software measurements*
- *Consultancy on client projects in both public and private sector*

Jan 2013 –
Jun 2015

**Senior Technical Consultant (full time),
Software Improvement Group (<http://www.sig.eu>), Amsterdam**

- *Consultancy on client projects in both public and private sector*
- *Development of interactive tools for exploration of source code*
- *Development of interactive visualization techniques*
- *Development of the SIG usability model*

2012 – 2013

**Tech Evangelist (Patterns & Practices , full time),
Patterns & Practices Department, Backbase, Amsterdam**

- *Collecting and sharing best software development and architecture practices related to the Backbase UX management platform*
- *Hands-on software development and testing*
- *Research and development of novel interactive systems*
- *Teaching, maintaining connections with academia*

2008 – 2012

**Assistant Professor (full time), User Centered Engineering (UCE),
Faculty of Industrial Design, Eindhoven University of Technology**

- *Research in the domain of design of interactive systems,*
- *Development of novel interactive systems*
- *Teaching, both undergraduate and master courses*
- *A proposer / project lead for the IOP-IPCR project*

2006 - 2008

**Research Scientist (full time), Semantic Media Interfaces,
Centre for Mathematics and Computer Sciences (CWI), Amsterdam**

- *Design of novel interactive systems,*
- *Exploring semantic media and software development topics,*
- *Participation in two international projects*
 - *The ITEA Passepartout project*
 - *K-SPACE Network of Excellence.*

1999 - 2005

**Software Engineer (full time),
The Center for Command Information Systems, Belgrade, Serbia.**

- *Development of information systems, design of interactive systems,*
- *Exploring various software development topics,*
- *Supervising projects, teaching and education.*

Software Development Skills

- Highly experienced in Java, JavaScript, HTML, CSS, SVG, SQL.
- Previous experience in C/C++, C#, Python, VBScript, ASP(X), JSP, Visual Basic, Antlr.
- Also (in the dawn of education) Ruby, Groovy, PHP, Lisp, Fortran, Assembler. Long time ago I also used to program in Clipper and Pascal.

Open-Source Projects Activities

The main developer and administrator for several open source systems:

- Sketchlet (<http://sketchlet.sourceforge.net/>)
- Sketchify (<http://sketchify.sourceforge.net/>)
- AMICO (<http://amico.sourceforge.net>)

Professional Community Activities

Honors and Grants

- October 2012 – Awarded the ACM Senior Grade (ACM award given to individuals who "*demonstrated performance that sets them apart from their peers through technical leadership, and technical or professional contributions.*")
- June 2006 - Recognized as a multimodal interface "guru" by SIMILAR, European Network of Excellence dedicated to multimodal interfaces.
- January 2000 – January 2002 – M.S. scholarship grant (first in rank) from The Ministry of Science, Research, and Technology, The Government of Serbia

Standardization: W3C activities

- Member of the W3C Multimedia Semantics Incubator Group

Interviews

- Book *SIMILAR Dreams, Multimodal Interfaces in Our Future Life*, UCL Presses Universitaires de Louvain, July 2005, ISBN: 2-930344-91-1, pp. 306-311

Professional Memberships

- ACM (Senior Member)
- IEEE Computer Society
- The Royal Institute of Philosophy
- International Association of Software Architects (IASA)
- System Architecture Study Group (SASG)

Languages

- **English, Dutch:** fluent
- **Serbian, Croatian:** native

Personal interests

- Athletics
- Philosophy

Teaching Experience

I have more than **10 years** of teaching and coaching experience in different roles and positions.

Professional educations:

- Author and presenter of O'Reilly Training Videos on ***Building Maintainable Software*** (±4hours)
- Co-author of the O'Reilly Webcast [Building maintainable software for sustainable business growth: 8 best practices](#)

2016-2017 Technical University in Eindhoven (TU/e):

Post-MSc [User System Interaction \(USI\)](#):

- [Data Analytics](#): ***Creating Business Value with Data and Analytics***, main lecturer

2008-2012, Technical University in Eindhoven (TU/e):

Undergraduate courses:

- Main lecturer for the course [Sketching Interactive Systems](#)
Industrial Design, TU/e
- [Coaching](#) individual students and projects at the bachelor level.

Master courses:

- Main lecturer for the course [Multi-Modal Interaction](#)
Industrial Design, TU/e
- [Coaching](#) individual students and projects at the master level

PhD students (daily supervisor)

2006/2007, Amsterdam:

- Intelligent Multimedia Technology ([Fall 2006, Fall 2007](#)) - Main Lecturer, Vrije Universiteit Amsterdam
- Multimedia Authoring ([Spring 2006](#)) - Main Lecturer, Vrije Universiteit Amsterdam

Selected publications

Books

1. **Z. Obrenovic, E. Stolterman**, *Design Instability: Notes on Design Complexity*, LeanPub 2017, 1st edition.

2. **Z. Obrenovic**, *Research and Practice: Essays of a Researcher-Practitioner*, LeanPub 2017, 1st edition.
3. **Z. Obrenovic**, *Human-Computer Interaction*, FON: TEMPUS, Belgrade, 2004, ISBN 86-7680-027-8, (in Serbian, adapted PhD Thesis).

International journal papers

1. **Z. Obrenovic**, "Insights from the Past: The IEEE Software History Experiment", *IEEE Software*, vol. 34,. No. 7, (Jul/Aug 2017), pp. 71-78.
2. **Z. Obrenovic**, "Research and Practice: The Curious Case of 'Small' Researchers-Practitioners", *Communications of the ACM*, vol. 56,. No. 9, (Sept 2013), pp. 38-40.
3. **Z. Obrenovic**, "The Hawthorne Studies and Their Relevance to HCI Research", *ACM interactions* 21, 6 (Nov-Dec 2014), pp. 46-51.
4. **Z. Obrenovic**, "Design as a Political Activity: Borrowing From Classical Political Theories", *ACM interactions* 22, 6 (Nov-Dec 2015), pp. 42-45.
5. **Z. Obrenovic**, "Doing research in practice: some lessons learned". *ACM Crossroads*, 20, 4 (June 2014), 15-17.
6. **Z. Obrenovic**, "The four points of the HCI research compass". *ACM interactions* 20, 3 (May 2013), 34-37.**Z. Obrenovic**, "Software Sketchifying – Bringing Innovation into Software Development", *IEEE Software*, vol. 30, no. 3 (March 2013), pp. 80-86.
7. **Z. Obrenovic**, Bart den Haak, "Integrating End-User Customization and Authentication: The Identity Crisis", *IEEE Security and Privacy*, Spetember/October 2012, Vol. 10, No. 5, pp. 82-85.
8. **Z. Obrenovic**, J.B. Martens, Sketching Interactive Systems with Sketchify, *ACM Transactions on Computer Human Interaction (ToCHI)*, Vol. 18, no. 1, March 2011. (Also presented at the ACM CHI 2011 conference)
9. **Z. Obrenovic**, D. Gašević, "End-User Service Computing: Spreadsheets as a Service Composition Tool", *IEEE Transactions on Services Computing*, vol. 1, no. 4, pp. 229-242, October-December, 2008.
10. **Z. Obrenovic**, J. Abascal, D. Starcevic, "Universal Accessibility as a Multimodal Design Issue", *Communications of the ACM*, Vol. 50, No. 5, May 2007, pp. 83-88.
11. **Zeljko Obrenovic**, Dušan Starcevic, Bran Selic, "A Model Driven Approach to Content Repurposing", *IEEE Multimedia*, Vol. 11, No. 1, January-March 2004, pp. 62-71.
12. **Z. Obrenovic**, D. Starcevic, "Modelling Multimodal Human-Computer Interaction", *IEEE Computer*, Vol. 37, No. 9, September 2004, pp. 65-72.
13. **Z. Obrenovic**, "Rethinking HCI education: teaching interactive computing concepts based on the experiential learning paradigm". *ACM interactions* 19, 3 (May 2012), 66-70.

14. **Z. Obrenovic**, "Design-Based Research: What We Learn When We Engage In Design Of Interactive Systems". *ACM interactions* 18, 5 (September 2011), 56-59.
15. **Zeljko Obrenovic**, Dragan Gasevic, Anton Eliens, "Stimulating Creativity Through Opportunistic Software Development", *IEEE Software*, Vol. 25, No. 6, Nov/Dec, 2008, pp. 64-70.
16. **Zeljko Obrenovic**, Dragan Gasevic, "Open-Source Software: All you do is put it together", *IEEE Software*, Vol. 24, No. 5, Sept/Oct, 2007, pp. 86-95.
17. **Zeljko Obrenovic**, Dragan Gasevic, "Mashing Up Oil and Water: Combining Heterogeneous Services for Diverse Users", *IEEE Internet Computing*, vol. 13, no. 6, pp. 56-64, November/December, 2009.
18. Lynda Hardman, **Zeljko Obrenovic**, Frank Nack, Brigitte Kerhervé, Kurt Piersol "Canonical processes of semantically annotated media production", *ACM Multimedia Systems Journal*, Volume 14, Number 6 / December, 2008, pp. 327-340.
19. **Zeljko Obrenovic**, "Web Accessibility and Open Source Software", *Disability & Rehabilitation: Assistive Technology* 2009, Vol. 4, No. 4, Pages 227-235.
20. **Z. Obrenovic**, Dušan Starcevic, "Adapting the Unified Software Development Process for User Interface Development", *Computer Science and Information Systems*, Volume 03, Issue 01 (June 2006), pp. 33-52.
21. M. Jovanovic, D. Starcevic, **Z. Obrenovic**, "Designing Aircraft Cockpit Displays: Borrowing from Multimodal User Interfaces", *Transactions on Computational Science* 3: pp. 55-65, 2009.
22. Emil Jovanov, Dušan Starcevic, Aleksandar Samardzic, Andy Marsh, **Zeljko Obrenovic**, "EEG analysis in a telemedical virtual world", *Future Generation Computer Systems* 15 (1999), pp. 255-263.