

Mladan Jovanović

University of Trento,
Department of Information Engineering and Computer Science
(DISI)
Via Sommarive, 38123 Povo (TN)
phone: +393245886519
skype: mladjanjovanovic
email: mladjan.jovanovic@unitn.it
web: <http://mladjan.eu>

Research Interests

Design for Healthcare and Well-being, User-Centred Design, Gamification, Design for Behaviour Change, Human Computation, Social Computing, Software Engineering

Education

- Dec 2009 – June 2013 **PhD in Computer Science**, School of Electrical Engineering, University of Belgrade, Serbia.
Dissertation title: “Development of Context-Aware User Interfaces”.
- Dec 2005 – Apr 2009 **MSc in Computer Science (Serbian - Magister of Science)**, School of Electrical Engineering, University of Belgrade, Serbia.
GPA: 10.00/10.00.
Dissertation title: “Software Support for Ground Control Station for Unmanned Aerial Vehicle”.
- Oct 2000 – Sep 2005 **Five-year BSc in Computer Science**, Military Technical Academy, University of Belgrade. GPA: 9.19/10.00.

Experience

Academic

- Sep 2017 – present **Lecturer (part-time)**, DISI, University of Trento, Italy.
Human-Computer Interaction course (BSc in Computer Science).
User-Centred Design course (MSc in Human-Computer Interaction).
- July 2016 – Jan 2018 **Lecturer and Programme Management Assistant (part-time)**, DISI, University of Trento, Italy.
The Post-master’s Programme in Smart Community Design and Management (SCODEM) <http://latemar.science.unitn.it/scodem>.
Mobile Computing course.
Thesis supervision of two students.

- May 2016 – present **Research Fellow (full-time)**, DISI, University of Trento, Italy.
 ACANTO - A CyberphysicAl social NeTwOrk using robot friends (<http://www.ict-acanto.eu/>), the European Union's Horizon 2020 Research and Innovation Programme - Societal Challenge 1 (DG CONNECT/H).
 Research, design and evaluation of a technology for active ageing that promotes physical activity and social interaction.
- Mar 2014 – Mar 2016 **Research Fellow (Marie-Curie Fellowship, full-time)**, DISI, University of Trento, Italy.
- Participation in four research and development projects:
 - ESSENCE (Evolution of Shared SEmaNtics in Computational Environments) Marie Curie Initial Training Network (FP7-PEOPLE-2013-ITN) (<http://essence-network.com>),
 - Knowledge visualisation – a case study of entity-centric Open Data,
 - Gamification for knowledge maintenance,
 - Human computation for building and maintaining a large scale multilingual lexico-semantic resource.
 - Co-supervision of two PhD students.
- Feb 2007 – Dec 2012 **Research and Teaching Assistant (part-time)**, Laboratory for Multimedia Communications, Faculty of Organisational Sciences, University of Belgrade.
- Projects:
 - Model-driven development of context-aware user interfaces with emphasis on user context modelling (PhD thesis),
 - Ground control platform for visualising multidimensional data from the unmanned aerial vehicle (Magister thesis),
 - 3D terrain modelling and visualisation,
 - User modelling in games for learning.
 - Teaching the undergraduate course in Multimedia Information Systems.
 - Supervising undergraduate students.

Industrial

- Sep 2005 – Feb 2014 **Software developer and Project manager (full-time)**, Center for Command Information Systems, Belgrade, Serbia.
- Development of information systems,
 - Design of interactive systems,
 - Project management,
 - Consulting software development projects,
 - Supervising junior colleagues,
 - Lecturing internal courses (UML, ASP.NET).

Research and Development

Recent Research Projects

- May 2016 – present ACANTO project, Horizon 2020 Research and Innovation Programme - Societal Challenge, **Research Fellow**.
- Research, design, development and evaluation of the technology for active ageing that promotes physical activity and social interaction:
 - User requirements elicitation for a social network and recommendation system,
 - Design and evaluation of a mobile prototype frontend,
 - Design and evaluation of the recommendation system and social network features.
- Mar 2014 – Mar 2016 ESSENCE Project, FP7 Marie Curie Initial Training Network, **Marie Curie Experienced Researcher (ER)**.
- Research, design and development of the ESSENCE Challenge (<https://www.essence-network.com/challenge/>) - a competition designed to attract participation from various AI communities, an integrative testbed for individual projects within ESSENCE network, and a reusable benchmark for outreach and commercialisation activities.
 - Organisational roles in ESSENCE events (workshops, autumn and summer school, coding camp).
- Sep 2014 – Sep 2015 Word games for knowledge maintenance.
- User research of a crosswords game for maintaining a knowledge base,
 - Research, design and development of quality control metrics (user reputation) for the game.
- Sep 2014 – Nov 2014 Qualitative analysis and evaluation of the crowdsensing platform for urban security, EIT ICT project, collaboration with DFKI.
- Mar 2014 – Mar 2016 Knowledge visualisation – a case study of entity-centric Open Data
- Research, design and evaluation of the technology for visualising and exploring Open Data as knowledge (representing both TBox - schemas and ABox - instances),
 - Co-supervision of a PhD student.
- Jan 2015 – Mar 2016 Human computation for building and maintaining a large scale, multilingual lexico-semantic resource
- Project management,
 - Research, design and evaluation of a platform to create and maintain the resource,
 - Co-supervision of a PhD student.

Organizational Roles

- 27th – 30th Oct 2014 1st ESSENCE Autumn School, Ischia, Italy
(<https://www.essence-network.com/essence-events/autumnschool/>).
Organising Committee Member, preparation of the event, (newsletter, poster, website).
- 20th – 22nd May 2015 3rd ESSENCE International Workshop: Algorithms for processing meaning, Barcelona, Spain
(<https://www.essence-network.com/essence-events/essence2015-workshop/>).
Organising and Steering Committee Member, preparation of the event (poster, website).
- 25th – 29th May 2015 1st ESSENCE Coding Camp, Sant Feliu de Guíxols, Spain.
Organiser, design and implementation of a baseline solution for ESSENCE Challenge problem.
- 24th – 28th Aug 2015 2nd ESSENCE Summer School on Evolving Semantic Systems, Edinburgh, UK.
(<https://www.essence-network.com/essence-events/summer-school/>).
Organising Committee Member, preparation of the event (newsletter, poster, website).

Research Training

- 27th – 31th Oct 2014 Research project management and teamwork. Provided by Sara Shinton, Shinton Consulting. Ischia, Italy.
- 22th – 29th May 2015 Oral and written communication of personal research. Provided by Daniël Schut. Barcelona/Sant Feliu de Guíxols, Spain.

Visiting Positions

- Jan 2016 **Visiting Researcher**, School of Informatics, University of Edinburgh.
- April 2018 **Visiting Researcher**, PaCT Lab, Northumbria University.

Development skills

Proficient in Java, C/C++, C#, JavaScript. Experienced in UML and User-Centered design methods.

Software tools, libraries and technologies

Prototyping: Mockplus, Balsamiq
Computer graphics: OpenGL, Java2D/3D
Speech platforms: Java Speech, Sphinx, VoiceXML
Web technologies: XML, HTML, CSS, Spring framework, ASP.NET
CASE tools: StarUML, Eclipse Modeling Framework
Databases: Microsoft SQL Server, PostgreSQL
Development tools: Eclipse, NetBeans, Microsoft Visual Studio

Publications

International (refereed) journal papers

Jovanović, M., Starčević, D., Jovanović, Z., “Reusability Aspects in the Design of a Data Visualization Software Architecture for Unmanned Aerial Vehicles”, *Journal of Aerospace Information Systems*, American Institute of Aeronautics and Astronautics (AIAA), Vol. 11, No. 6, pp. 359-371, 2014.

Jovanović, M., Starčević, D., Minović, M., Štavljanin, V., “Motivation and Multimodal Interaction in Model-Driven Educational Games Design”, *IEEE Transactions on Systems, Man, and Cybernetics Part A: Systems and Humans*, Special Issue on Human Semantic Web, Vol. 40, No. 4, pp. 217-224.

Minović, M., Milovanović, M., Starčević, D., **Jovanović, M.**, “Learning objects in educational games”, *Int. Journal Technology Enhanced Learning*, Vol. 2, No. 4, pp. 336-346. 2010.

Jovanović, M., Starčević, D., Obrenović, Ž., “Designing Aircraft Cockpit Displays: Borrowing from Multimodal User Interfaces”, *Transactions on Computational Science III*, LNCS 5300, pp. 55-65, 2009.

National (refereed) journal papers

Jovanović, M., Starčević, D., Jovanović, Z., “Languages For Model-Driven Development Of User Interfaces: Review The State Of The Art”, *Yugoslav Journal of Operational Research*, Vol. 23, No. 3.

Books

Jovanović, M., Starčević, D., “Adobe Flash Practice Book”, Faculty of Organizational Sciences, Belgrade, 2009, ISBN 978-86-7680-199-2. (in Serbian)

Workshop papers

Jovanovic, M., “Gamifying Knowledge Maintenance”, *3rd International ESSENCE Workshop: Algorithms for Processing Meaning*, May 20-22, 2015, Barcelona, Spain.

Conference papers

De Angeli, A., Cozza, M., **Jovanovic, M.**, Tonolli, L., Mushiba, M., McNeill, A., Coventry, L., “Understanding Motivations in Designing for Older Adults”, 12th International Conference on the Design of Cooperative Systems - Symposium on Challenges and experiences in designing for an ageing society, Trento, Italy, May 24, 2016.

Giunchiglia, F., **Jovanovic, M.**, Huertas-Migueláñez, M., Batsuren, K., “Crowdsourcing a large scale multilingual lexico-semantic resource”, Third AAAI Conference on Human Computation and Crowdsourcing – HCOMP 2015, Work in Progress, San Diego, CA, Nov 8-11, 2015.

Ojha, S., **Jovanovic, M.**, Giunchiglia, F., “Entity-Centric Visualization of Open Data”, *15th International Conference on Human-Computer Interaction – INTERACT 2015*. Springer International Publishing, pp. 149-166, 2015.

Jovanovic, M., Starcevic, D., Jovanovic, Z., “Bridging User Context and Design Models to Build Adaptive User Interfaces”, *Human-Centered Software Engineering*. Springer Berlin Heidelberg, pp. 36-56, 2014.

Jovanovic, M., Starcevic, D., Jovanovic, Z., “Formal specification of usability measures in model-driven development of context-sensitive user interfaces”, *Proceedings of the International Working Conference on Advanced Visual Interfaces (AVI)*, ACM Press, 2012.

Jovanović, M., Starčević, D., Jovanović, Z., “Software Support For Ground Control Station For Unmanned Aerial Vehicle”, *5th ASME/IEEE International Conference on Mechatronic and Embedded Systems and Applications*, IEEE Communications Society, Paper no. DETC2009-86456, pp. 557-566, 2009.

Jovanović, M., Starčević, D., “Object Oriented Terrain Modeling: Lessons Learned from Java3D Development Issues”, *International Conference on Computational Intelligence, Modelling and Simulation*, pp. 147-152, IEEE Computer Society, 2009.

Minovic, M., Milovanovic, M., **Jovanovic, M.**, Starcevic, D., “Knowledge Modeling for Educational Games”, *WSKS 2009*, Springer-Verlag LNAI 5736, pp. 156–165, 2009.

Minovic, M., Milovanovic, M., **Jovanovic, M.**, Starcevic, D., “Model driven development of user interfaces for educational games”, *Conference on Human-System Interactions (HSIo9)*, pp. 611-617, IEEE, 2009.

Jovanović, M., Starčević, D., “An approach to terrain modeling using Java3D technology”, *XVII Telecommunications Forum - TELFOR 2009*, Belgrade, Serbia, 2009.

Jovanović, M., Starčević, D., Minović, M., Štavljanin, V., “Educational Games Design Issues: Motivation and Multimodal Interaction”, *WSKS 2008*, Springer-Verlag LNAI 5288, pp. 215–224, 2008. (**best paper award**).

Jovanović, M., Starčević, D., “Software Architecture for Ground Control Station for Unmanned Aerial Vehicle”, *10th International Conference on Computer Modelling and Simulation*, pp. 284-288, IEEE Computer Society, 2008.

Jovanović, M., Starčević, D., Minović, M., Štavljanin, V., “Surviving the Design of Educational Games: Borrowing from Motivation and Multimodal Interaction”, *Conference on Human-System Interactions (HSIo8)*, pp. 194-198, IEEE, 2008.

Jovanović, M., Starčević, D., Obrenović, Ž., “Improving Aircraft Cockpit Environment Using Multimodal User Interfaces”, *In Extended Proceedings of the 12th International Conference on Human-Computer Interaction 2007*, Springer-Verlag LNCS, 2007.

Jovanović, M., Starčević, D., Obrenović, Ž., “UAV-Based Simulation Environment: Experience Report”, *EUROCON The International Conference on “Computer as a Tool”*, IEEE, 2007.

Jovanović, M., Starčević, D., Obrenović, Ž., Obradović, D., “Simulation Environment for Unmanned Aerial Vehicle”, *XV Telecommunications Forum - TELFOR 2007*, Belgrade, Serbia, 2007.

Personal

- Date of birth: 25.05.1981 (Novi Sad, Serbia).
- Languages: Serbian (native), English, advanced in Italian.
- Hobbies: sports, singing, playing the guitar.