

*Curriculum Vitæ*

# VITOMIR KOVANOVIC

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Institute for Language, Cognition and Computation  
School of Informatics  
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## RESEARCH INTERESTS

- Learning analytics
- Educational technology
- Online and distance education
- Inquiry-based learning
- Self-regulated learning
- Massive open online courses
- Discourse and content analytics
- Educational data mining
- Social network analysis

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## EDUCATION AND WORK EXPERIENCE

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### EDUCATION

**Ph.D.** School of Informatics, The University of Edinburgh, 2017 (expected, dissertation submitted)

Dissertation title: *“Assessing cognitive presence using automated learning analytics methods.”*

Principal supervisor: Professor Dragan Gasevic, [www.sfu.ca/~dgasevic](http://www.sfu.ca/~dgasevic)  
The University of Edinburgh, UK.

Assistant supervisors: Professor Marek Hatala, [www.sfu.ca/~mhatala](http://www.sfu.ca/~mhatala)  
Simon Fraser University, Canada.

Professor George Siemens, [bit.ly/gs-scholar](http://bit.ly/gs-scholar)  
The University of Texas Arlington, USA.

Note: Transferred from a Ph.D. program at Simon Fraser University, 2011 – 2014 after Professor Gasevic got appointed the Chair of Learning Analytics at the University of Edinburgh.

**M.Sc.** Software Engineering, The University of Belgrade, 2011.

**B.Sc.** Information Systems, University of Belgrade, 2009.

## EMPLOYMENT

### Academic experience

- Feb 2015 – present     **Research Associate**, University of Edinburgh, United Kingdom.
- Work on Intel Education funded project “Adaptive Learning.”
  - Preparation of an SSHRC Insight grant on the role of affect in online learning and the ways to measure and detect student emotions and affect.
  - Collaboration with Boeing, NASA, and Microsoft regarding the analysis of edX data from the model-based systems engineering program.
- Aug 2014 – present     **Research Assistant**, LINK Lab, University of Texas Arlington, USA.
- Work on an NSF Grant #1546271 “BIGDATA: Collaborative Research: F: Study of a Cyber-Enabled Social Computing Framework for Improving Practice in Online Computing Communities.”
  - Preparation of a grant for Bill & Melinda Gates Foundation looking at the analytics of social collaboration in the cross-institutional research network.
  - Analysis of “Data, Analytics, and Learning” MOOC course data.
  - Work on Bill & Melinda Gates Foundation funded “MOOC Research Initiative (MRI)” project.
  - edX Data Tsar (collection of the MOOC data from edX).
- Dec 2014 – Aug 2015     **Research Assistant**, Ryerson University, Canada.
- Software development work on Denote, a Name-entity tagger.
- Sep 2012 – Jan 2013     **Research Assistant**, Athabasca University, Canada.
- Work on SSHRC Insight project “Tools and Methods to Help Learners Self-regulate Learning and Increase Learning Success.”
  - Work on NSERC Engage project “Analytics for Social Learning Environments” in collaboration with Desire2Learn.
- Sep 2011 – Jan 2012     **Research Assistant**, Simon Fraser University, Canada.
- Work on NSERC Engage project “Requirements and verification engineering for workflows based on event-driven architectures” in collaboration with EMRLogic.

### Industry experience

- May 2015 – present     **Senior Data Scientist**, Genuine Market Research, UK.
- Data mining of market research data.
  - Development of data analytics solutions and visualizations.
- Apr 2008 – Aug 2011     **Software Engineer**, Mozzart Ltd., Serbia.
- Development and maintenance of server-side architecture of a distributed Java-based information system for sports betting.
  - Development of software deployment platform.
  - Development of UX framework for the internal client application.
- Jun 2005 – Aug 2005     **Software engineer intern**, Mozzart Ltd., Serbia.
- Development of log analysis tool.

## HONORS AND AWARDS

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### BEST PAPER AWARDS AND NOMINATIONS

- 2016 **Best paper nominee**, “Translating network position into performance: Importance of centrality in different network configurations,” LAK’16 conference, Edinburgh, United Kingdom.
- 2015 **Best paper award**, “*Penetrating the black box of time-on-task estimation*,” LAK’15 conference, Marist College, Poughkeepsie, NY, USA.
- 2015 **Best paper award**, “Recognising learner autonomy: Lessons and reflections from a joint x/c MOOC,” HERDSA’15 conference, Melbourne, Australia.

### SCHOLARSHIPS, STUDENTSHIPS, AND FELLOWSHIPS

- 2015 **Graduate Studentship (£35,000 + £35,000 tuition fees across 2.5 years)**, School of Informatics, University of Edinburgh, Edinburgh, UK.
- 2014 **Graduate Fellowship (\$6,250 CAD)**, Simon Fraser University, Vancouver, Canada.
- 2013 **Helmut & Hugo Eppich Family Graduate Scholarship (\$1,500 CAD)**, Simon Fraser University, Vancouver, Canada.
- 2013 **Graduate Fellowship (\$6,250 CAD)**, Simon Fraser University, Vancouver, Canada.
- 2011 **C.D. Nelson Memorial Graduate Entrance Scholarship (\$30,000 CAD across two years)**, Simon Fraser University, Vancouver, Canada.
- 2011 **Young Talents Scholarship**, Ministry of Education, Government of Serbia, Belgrade, Serbia.
- 2007 **City Council Scholarship**, Belgrade City Council, Belgrade, Serbia.
- 2007 **Mozzart Student Scholarship**, Mozzart ltd., Belgrade, Serbia.
- 2006 **City Council Scholarship**, Belgrade City Council, Belgrade, Serbia.
- 2005 **Student Scholarship**, 2005, Ministry of Education, Government of Serbia, Belgrade, Serbia.

## FUNDING SUPPORT

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### CURRENT GRANTS

- *Exploring Flexible Modes of Online Education*  
Principal Investigator: Manataki, A.  
Co-Principal Investigators: Gasevic, D., Scott, A-M., Joksimovic, S., & Kovanovic, V.  
Agency: The University of Edinburgh, UK  
Funding scheme: Principal’s Teaching Award Scheme (PTAS)  
Duration: Jan 01, 2017 – Jun 30, 2017  
Amount: £4,701

## PAST GRANTS

- *Automated System for Cognitive Presence Coding*  
Principal Investigator: Kovanovic, V.  
Co-Principal Investigators: Joksimovic, S. & Gasevic, D.  
Agency: JISC, UK  
Funding scheme: Learning Analytics Micro projects  
Duration: Aug 01, 2016 – Jan 31, 2016  
Amount: £5,000

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## PUBLICATIONS

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### PUBLICATIONS OVERVIEW

My work applies data analytics and data mining techniques to higher education data with a particular emphasis on measuring student self-regulation and indicators of engagement in both traditional and massive open online environments. I publish broadly in both applied computer science venues (e.g. Learning Analytics & Knowledge Conference, Computers & Education, Journal of Learning Analytics) as well as in education venues (e.g. The International Review of Research in Open and Distributed Learning).

- **h-index:** 12 (Google Scholar)
- **i10-index:** 14 (Google Scholar)
- **Citations:** 465 (Google Scholar)
- **Number of distinct co-authors:** 38
- **Google Scholar URL:** <http://bit.ly/vk-scholar>

### REFEREED JOURNAL PAPERS

#### Under review

- [JP 1] Joksimovic, S., Jovanovic, J., Kovanovic, V., Gasevic, D., Milikic, N., Zouaq, A., & van Saalduinen, J.-P. (under review). Comprehensive analysis of discussion forum participation: from speech acts to discussion dynamics and course outcomes. Manuscript Submitted for Publication to *Computers in Human Behavior*.
- [JP 2] Poquet, O., Kovanovic, V., Vries, P. de, Hennis, T., Joksimovic, S., Gasevic, D., & Dawson, S. (under review). Social presence in massive open online courses. Submitted for publication to *The International Review of Research in Open and Distributed Learning*.
- [JP 3] Kovanovic, V., Joksimovic, S., Poquet, O., Hennis, T., Cukic, I., de Vries, P., Hatala, M., Dawson, S., Siemens, G., & Gasevic, D. (under review). Exploring Communities of Inquiry in Massive Open Online Courses. Submitted for publication to *Computers & Education*.
- [JP 4] Dowell, N. M. M., Brooks, C., Kovanovic, V., Joksimovic, S., Waters, Z., & Gasevic, D. (under review). The Future of Educational Discourse: Sociotechnical Shifts and Their Impact for Educational Researchers. Submitted for publication to *Educational Researcher*.
- [JP 5] Joksimovic, S., Poquet, O., Kovanovic, V., Dowell, N. M. M., Mills, C., Gasevic, D., Dawson, S., Graesser, A. C., & Brooks, C. (under review). How do we model learning at scale? A systematic review of the literature. Submitted for publication to *Review of Educational Research*.

- [JP 6] Joksimovic, S., Dowell, N. M. M., Poquet, O., Kovanovic, V., Gasevic, D., Dawson, S., & Graesser, A. C. (under review). Exploring development of social capital in cMOOC through language and discourse. Submitted for publication to *Internet and Higher Education*.

### To appear

- [JP 7] Crosslin, M., Dellinger, J., Joksimovic, S., Kovanovic, V., & Gasevic, D. (2017). Customizable modalities for individualized learning: Examining patterns of engagement in dual-layer MOOCs. To appear in *Online Learning*.

### Published

- [JP 8] Gasevic, D., Kovanovic, V., & Joksimovic, S. (2017). Piecing the learning analytics puzzle: a consolidated model of a field of research and practice. *Learning: Research and Practice*, 3(1), 63–78. doi:[10.1080/23735082.2017.1286142](https://doi.org/10.1080/23735082.2017.1286142)
- [JP 9] Slater, S., Joksimovic, S., Kovanovic, V., Baker, R. S., & Gasevic, D. (2016). Tools for educational data mining: A review. *Journal of Educational and Behavioral Statistics*. doi:[10.3102/1076998616666808](https://doi.org/10.3102/1076998616666808)
- [JP 10] Kovanovic, V., Gasevic, D., Dawson, S., Joksimovic, S., & Baker, R. (2016). Does time-on-task estimation matter? Implications on validity of learning analytics findings. *Journal of Learning Analytics*, 2(3), 81–110. doi:[10.18608/jla.2015.23.6](https://doi.org/10.18608/jla.2015.23.6)
- [JP 11] Gasevic, D., Adesope, O., Joksimovic, S., & Kovanovic, V. (2015). Externally-facilitated regulation scaffolding and role assignment to develop cognitive presence in asynchronous online discussions. *The Internet and Higher Education*, 24, 53–65. doi:[10.1016/j.iheduc.2014.09.006](https://doi.org/10.1016/j.iheduc.2014.09.006)
- [JP 12] Joksimovic, S., Gasevic, D., Kovanovic, V., Riecke, B. E., & Hatala, M. (2015). Social presence in online discussions as a process predictor of academic performance. *Journal of Computer Assisted Learning*, 31(6), 638–654. doi:[10.1111/jcal.12107](https://doi.org/10.1111/jcal.12107)
- [JP 13] Joksimovic, S., Gasevic, D., Loughin, T. M., Kovanovic, V., & Hatala, M. (2015). Learning at distance: Effects of interaction traces on academic achievement. *Computers & Education*, 87, 204–217. doi:[10.1016/j.compedu.2015.07.002](https://doi.org/10.1016/j.compedu.2015.07.002)
- [JP 14] Kovanovic, V., Gasevic, D., Joksimovic, S., Hatala, M., & Adesope, O. (2015). Analytics of communities of inquiry: Effects of learning technology use on cognitive presence in asynchronous online discussions. *The Internet and Higher Education*, 27, 74–89. doi:[10.1016/j.iheduc.2015.06.002](https://doi.org/10.1016/j.iheduc.2015.06.002)
- [JP 15] Kovanovic, V., Joksimovic, S., Gasevic, D., Siemens, G., & Hatala, M. (2015). What public media reveals about MOOCs: A systematic analysis of news reports. *British Journal of Educational Technology*, 46(3), 510–527. doi:[10.1111/bjet.12277](https://doi.org/10.1111/bjet.12277)
- [JP 16] Skrypnyk, O., Joksimovic, S., Kovanovic, V., Gasevic, D., & Dawson, S. (2015). Roles of course facilitators, learners, and technology in the flow of information of a cMOOC. *The International Review of Research in Open and Distributed Learning*, 16(3). Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/2170>
- [JP 17] Kovanovic, V., Gasevic, D., & Hatala, M. (2014). Learning analytics for communities of inquiry. *Journal of Learning Analytics*, 1(3), 195–198. Retrieved from <http://epress.lib.uts.edu.au/journals/index.php/JLA/article/view/4234>

- [JP 18] Joksimovic, S., Gasevic, D., Kovanovic, V., Adesope, O., & Hatala, M. (2014). Psychological characteristics in cognitive presence of communities of inquiry: A linguistic analysis of online discussions. *The Internet and Higher Education*, 22, 1–10. doi:[10.1016/j.iheduc.2014.03.001](https://doi.org/10.1016/j.iheduc.2014.03.001)
- [JP 19] Gasevic, D., Kovanovic, V., Joksimovic, S., & Siemens, G. (2014). Where is research on massive open online courses headed? A data analysis of the MOOC Research Initiative. *The International Review of Research in Open and Distributed Learning*, 15(5). Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/1954>

## REFEREED BOOK CHAPTERS

### Published

- [BC 1] Kovanovic, V., Joksimovic, S., Gasevic, D., Hatala, M., & Siemens, G. (2017). Content analytics: The definition, scope, and an overview of published research. In C. Lang, G. Siemens, A. Wise, & D. Gasevic (Eds.), *Handbook of Learning Analytics and Educational Data Mining* (pp. 77–92). Edmonton, AB: SoLAR. doi:[10.18608/hla17.007](https://doi.org/10.18608/hla17.007)
- [BC 2] Kovanovic, V., Joksimovic, S., Gasevic, D., Hatala, M., & Siemens, G. (2017). Content Analytics: the definition, scope, and an overview of published research. In G. Siemens & C. Lang (Eds.), *To appear in Handbook of learning analytics and educational data mining*. Society for Learning Analytics Research.
- [BC 3] Krcadinac, U., Stankovic, M., Kovanovic, V., & Jovanovic, J. (2009). Intelligent multi-agent systems. In A. Cartelli & M. Palma (Eds.), *Encyclopedia of information communication technology* (pp. 464–469). IGI Global. Retrieved from <http://www.igi-global.com/chapter/intelligent-multi-agent-systems/13393>
- [BC 4] Stankovic, M., Krcadinac, U., Kovanovic, V., & Jovanovic, J. (2009). Intelligent software agents and multi-agent systems. In M. Khosrow-Pour (Ed.), *Encyclopedia of information science and technology* (2nd Edition, pp. 2126–2131). IGI Global. Retrieved from <http://www.igi-global.com/chapter/intelligent-software-agents-multi-agent/13872>

## REFEREED CONFERENCE PAPERS

### Published

- [CP 1] Dowell, N. M. M., Brooks, C., Kovanovic, V., Joksimovic, S., & Gasevic, D. (2017). The Changing patterns of MOOC discourse. In *Proceedings of the Fourth ACM Conference on Learning @ Scale (L@S'17)* (pp. 283–286). New York, NY: ACM. doi:[10.1145/3051457.3054005](https://doi.org/10.1145/3051457.3054005).
- [CP 2] Ruiperez-Valiente, J. A., Joksimovic, S., Kovanovic, V., Gasevic, D., Munoz-Merino, P. J., & Delgado Kloos, C. (2017). A data-driven method for the detection of close submitters in online learning environments. In *Proceedings of the 26th International Conference on World Wide Web Companion (WWW'17)* (pp. 361–368). Republic and Canton of Geneva, Switzerland: International World Wide Web Conferences Steering Committee. doi:[10.1145/3041021.3054161](https://doi.org/10.1145/3041021.3054161)
- [CP 3] Kovanovic, V., Joksimovic, S., Katerinopoulos, P., Michail, C., Siemens, G., & Gasevic, D. (2017). Developing a MOOC experimentation platform: Insights from a user study. In *Proceedings of the Seventh International Conference on Learning Analytics & Knowledge (LAK'17)* (pp. 1–5). New York, NY: ACM. doi:[10.1145/3027385.3027398](https://doi.org/10.1145/3027385.3027398)

- [CP 4] Kovanovic, V., Joksimovic, S., Waters, Z., Gasevic, D., Kitto, K., Hatala, M., & Siemens, G. (2016). Towards automated content analysis of discussion transcripts: A cognitive presence case. In *Proceedings of the Sixth International Conference on Learning Analytics & Knowledge (LAK'16)* (pp. 15–24). New York, NY: ACM. doi:[10.1145/2883851.2883950](https://doi.org/10.1145/2883851.2883950)
- [CP 5] Joksimovic, S., Manataki, A., Gasevic, D., Dawson, S., Kovanovic, V., & de Kereki, I. F. (2016). Translating network position into performance: Importance of centrality in different network configurations. In *Proceedings of the Sixth International Conference on Learning Analytics & Knowledge (LAK'16)* (pp. 314–323). New York, NY: ACM. doi:[10.1145/2883851.2883928](https://doi.org/10.1145/2883851.2883928) (**best paper nominee**)
- [CP 6] Kovanovic, V., Joksimovic, S., Gasevic, D., Siemens, G., & Hatala, M. (2015). MOOCs in the news: A European perspective. In *Proceedings of the 2015 HOME Conference* (pp. 36–48). Rome, Italy: EADTU. Retrieved from <http://eadtu.eu/home/publications>
- [CP 7] Waters, Z., Kovanovic, V., Kitto, K., & Gasevic, D. (2015). Structure matters: Adoption of structured classification approach in the context of cognitive presence classification. In G. Zuccon, S. Geva, H. Joho, F. Scholer, A. Sun, & P. Zhang (Eds.), *Information Retrieval Technology. Proceedings of the 11<sup>th</sup> Asia Information Retrieval Societies Conference (AIRS'15)* (pp. 227–238). Springer International Publishing. doi:[10.1007/978-3-319-28940-3\\_18](https://doi.org/10.1007/978-3-319-28940-3_18)
- [CP 8] Dawson, S., Joksimovic, S., Kovanovic, V., Gasevic, D., & Siemens, G. (2015). Recognising learner autonomy: Lessons and reflections from a joint x/c MOOC. In *Proceedings of the 38<sup>th</sup> Higher Education Research and Development Society of Australasia Conference (HERDSA'15)*. Melbourne, AU: HERDSA. Retrieved from <http://herdsa-2015.p.asnevents.com.au/days/2015-07-08/abstract/22639> (**best paper award**)
- [CP 9] Dowell, N., Skrypnyk, O., Joksimovic, S., Graesser, A. C., Dawson, S., Gasevic, D., Hennis, T. A., de Vries, P., & Kovanovic, V. (2015). Modeling learners' social centrality and performance through language and discourse. In *Proceedings of the Eighth International Conference on Educational Data Mining (EDM'15)* (pp. 250–258). Madrid, Spain. Retrieved from [http://www.educationaldatamining.org/EDM2015/uploads/papers/paper\\_211.pdf](http://www.educationaldatamining.org/EDM2015/uploads/papers/paper_211.pdf)
- [CP 10] Joksimovic, S., Dowell, N., Skrypnyk, O., Kovanovic, V., Gasevic, D., Dawson, S., & Graesser, A. C. (2015). How do you connect? Analysis of social capital accumulation in connectivist MOOCs. In *Proceedings of the Fifth International Conference on Learning Analytics & Knowledge (LAK'15)* (pp. 64–68). New York, NY: ACM. doi:[10.1145/2723576.2723604](https://doi.org/10.1145/2723576.2723604)
- [CP 11] Joksimovic, S., Kovanovic, V., Jovanovic, J., Zouaq, A., Gasevic, D., & Hatala, M. (2015). What do cMOOC participants talk about in social media? A topic analysis of discourse in a cMOOC. In *Proceedings of the Fifth International Conference on Learning Analytics & Knowledge (LAK'15)* (pp. 156–165). New York, NY: ACM. doi:[10.1145/2723576.2723609](https://doi.org/10.1145/2723576.2723609)
- [CP 12] Kovanovic, V., Gasevic, D., Dawson, S., Joksimovic, S., Baker, R. S., & Hatala, M. (2015). Penetrating the black box of time-on-task estimation. In *Proceedings of the Fifth International Conference on Learning Analytics & Knowledge (LAK'15)* (pp. 184–193). New York, NY: ACM. doi:[10.1145/2723576.2723623](https://doi.org/10.1145/2723576.2723623) (**best paper award**)
- [CP 13] Kovanovic, V., & Djuric, D. (2012). Highway: A domain specific language for enterprise application integration. In *Proceedings of the Fifth India Software Engineering Conference (ISEC'12)* (pp. 33–36). New York, NY: ACM. doi:[10.1145/2134254.2134259](https://doi.org/10.1145/2134254.2134259)



## REFEREED WORKSHOP PAPERS

### Published

- [WP 1] Kovanovic, V., Joksimovic, S., Gasevic, D., & Hatala, M. (2014). What is the source of social capital? The association between social network position and social presence in communities of inquiry. In *Proceedings of the Graph-based Educational Mining Workshop (G-EDM) co-located with the Seventh International Conference on Educational Data Mining (EDM 2014)*. London, UK. Retrieved from <http://ceur-ws.org/Vol-1183>
- [WP 2] Kovanovic, V., Joksimovic, S., Gasevic, D., & Hatala, M. (2014). Automated content analysis of online discussion transcripts. In *Proceedings of the Learning Analytics and Machine Learning (LAML) Workshop co-located with the Fourth International Conference on Learning Analytics & Knowledge (LAK'14)*. Indianapolis, IN. Retrieved from <http://ceur-ws.org/Vol-1137>

## REFEREED POSTERS

### Published

- [PO 1] Kovanovic, V., Joksimovic, S., Poquet, O., Hennis, T., Dawson, S., Gasevic, D., de Vries, P., Hatala, M., & Siemens, G. (2017). Understanding the relationship between technology use and cognitive presence in MOOCs. In *Proceedings of the Seventh International Conference on Learning Analytics & Knowledge (LAK'17)* (pp. 582–583). New York, NY: ACM. doi:[10.1145/3027385.3029471](https://doi.org/10.1145/3027385.3029471)
- [PO 2] Kovanovic, V., Joksimovic, S., Gasevic, D., Owers, J., Scott, A.-M., & Woodgate, A. (2016). Profiling MOOC course returners: How does student behavior change between two course enrollments? In *Proceedings of the Third ACM Conference on Learning @ Scale (L@S 2016)* (pp. 269–272). New York, NY: ACM. doi:[10.1145/2876034.2893431](https://doi.org/10.1145/2876034.2893431)

## TECHNICAL REPORTS

### Published

- [TR 1] Kovanovic, V., Gasevic, D., Hatala, M., & Siemens, G. (in-press). A novel model of cognitive presence assessment using automated learning analytics methods. *Analytics4Learning Report*, SRI Education, USA. Retrieved from [http://a4li.sri.com/archive/papers/Kovanovic\\_2017\\_Presence.pdf](http://a4li.sri.com/archive/papers/Kovanovic_2017_Presence.pdf)
- [TR 2] Kovanovic, V., Joksimovic, S., Skrypnyk, O., Gasevic, D., Dawson, S., & Siemens, G. (2015). The history and state of distance education. In G. Siemens, D. Gasevic, & S. Dawson (Eds.), *Preparing for the digital university: a review of the history and current state of distance, blended, and online learning*. Athabasca University. Retrieved from <http://linkresearchlab.org/PreparingDigitalUniversity.pdf>
- [TR 3] Joksimovic, S., Kovanovic, V., Skrypnyk, O., Gasevic, D., Dawson, S., & Siemens, G. (2015). The history and state of online learning. In G. Siemens, D. Gasevic, & S. Dawson (Eds.), *Preparing for the digital university: a review of the history and current state of distance, blended, and online learning*. Athabasca University. Retrieved from <http://linkresearchlab.org/PreparingDigitalUniversity.pdf>
- [TR 4] Skrypnyk, O., Joksimovic, S., Kovanovic, V., Dawson, S., Gasevic, D., & Siemens, G. (2015). The history and state of blended learning. In G. Siemens, D. Gasevic, & S. Dawson (Eds.), *Preparing for the digital university: a review of the history and current state of distance, blended, and online learning*. Athabasca University. Retrieved from <http://linkresearchlab.org/PreparingDigitalUniversity.pdf>



## TALKS, PRESENTATIONS, AND MEDIA

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### SEMINARS AND COLLOQUIA TALKS AND PRESENTATIONS

- [TP 1] Kovanovic, V. (2017). LA Course Design Framework. Presented at the Learning Analytics Curriculum workshop co-located with the Seventh International Conference on Learning Analytics & Knowledge (LAK'17), Simon Fraser University, Vancouver, BC, Canada.
- [TP 2] Kovanovic, V. (2016). Novel model of cognitive presence assessment using automated learning analytics methods. Presented at *The University of Michigan Academic Innovation Seminar Series*, October 10, 2016, The University of Michigan, Ann Arbor, MI, USA.
- [TP 3] Kovanovic, V. (2016). Novel model of cognitive presence assessment using automated learning analytics methods. October 5, 2016, The University of Pennsylvania, Philadelphia, PA, USA.
- [TP 4] Kovanovic, V. (2016). Effective teaching and learning in online and blended environments. Invited talk at *the 2016 Education, Arts, and Social Sciences (EAS) Teaching Academics Network Event*, March 9, 2016, The University of South Australia, Adelaide, Australia.
- [TP 5] Kovanovic, V. (2015). Automated content analysis of discussion transcripts. Presented at *The Dealing with Data conference*, August 31, 2015, The University of Edinburgh, Edinburgh, UK.
- [TP 6] Kovanovic, V. (2015). Automated system for cognitive presence coding. Presented at *The Third JISC UK Learning Analytics Network event*, June 24, 2015, Nottingham Trent University, Nottingham, UK.
- [TP 7] Kovanovic, V. (2015). MOOCs & social learning: Challenges and opportunities. *The FutureLearn Academic Networking*, June 15, 2015, The Open University, Milton Keynes, UK.
- [TP 8] Kovanovic, V. (2015). MOOCs & social learning: Challenges and opportunities. Presented at *The Institute for Adaptive and Neural Computation (ANC) workshop series*, June 2, 2015, The University of Edinburgh, Edinburgh, UK.
- [TP 9] Kovanovic, V. (2015). Automated content analysis of cognitive presence. Presented at *The NSF-funded BCC Educational Discourse Workshop*, May 4, 2015, School of Information, University of Michigan, Ann Arbor, MI, USA.
- [TP 10] Kovanovic, V. (2015). Learning analytics for communities of inquiry. Presented at *The Doctoral Consortium collocated with the Fifth International Conference on Learning Analytics & Knowledge (LAK'15)*, March 17, 2015, Marist College, Poughkeepsie, NY, USA.

### POSTER PRESENTATIONS

- [PP 1] Kovanovic, V., Joksimovic, S., Gasevic, D., & Hatala, M. (2015). Learning analytics for communities of inquiry. Poster presented at *the eLearning@ed Conference*, April 23, 2015, The University of Edinburgh, Edinburgh, UK.
- [PP 2] Kovanovic, V., Joksimovic, S., Gasevic, D., & Hatala, M. (2015). Learning analytics for communities of inquiry. Poster presented at *the Fifth International Conference on Learning Analytics & Knowledge (LAK'15)*, March 18, 2015, Marist College, Poughkeepsie, NY, USA.

[PP 3] Kovanovic, V., Joksimovic, S., Gasevic, D., & Hatala, M. (2014). Learning analytics for communities of inquiry: Technology use and cognitive presence in online discussions. Poster presented at *The Second Learning Analytics Summer Institute (LASI'14)*, June 30, 2014, Harvard University, MA, USA.

## SELECTED MEDIA MENTIONS

- [MM 1] Doug Clow (March 31, 2016). Does Time-on-task Estimation Matter? Implications on Validity of Learning Analytics Findings. *LACE Project Evidence Hub*. Retrieved from <http://evidence.laceproject.eu/?evidence=does-time-on-task-estimation-matter-implications-on-validity-of-learning-analytics-findings>
- [MM 2] Will Venn (March 1, 2016). Preparing for the future of digital learning. *UniSA News*. Retrieved from <http://w3.unisa.edu.au/unisanews/2016/March/story3.asp>
- [MM 3] Charlie Chung (June 22, 2015). Report Review of Siemen's "Preparing for the Digital University." *Class Central News*. Retrieved from <https://www.class-central.com/report/george-siemens-preparing-for-digital-university/>
- [MM 4] Study highlights efficacy of digital higher education (May 8, 2015). *University World News*. Retrieved from <http://www.universityworldnews.com/article.php?story=2015050813160619>
- [MM 5] Study provides foundation for the future of digital higher education (May 1, 2015). *Phys.org*. Retrieved from <http://phys.org/news/2015-05-foundation-future-digital-higher.html>
- [MM 6] Bridget Lewis (April 30, 2015). UT Arlington LINK Lab study provides foundation for the future of digital higher education. *The University of Texas Arlington News Centre*. Retrieved from <http://www.uta.edu/news/releases/2015/04/siemens-mooc-report.php>
- [MM 7] Casey Fabris (April 30, 2015). What is being learned from MOOCs? New report takes stock. *The Chronicle of Higher Education*. Retrieved from <http://www.chronicle.com/blogs/wiredcampus/what-is-being-learned-from-moocs-new-report-takes-stock/56487>

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## PROFESSIONAL SERVICE ACTIVITIES

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### CONFERENCE ORGANIZATION

#### Conference organization

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|----------------------------|--|
| Program co-chair           | The Third Annual Conference on Learning with MOOCs (LWMOOCs'16), October 6-7, 2016, The University of Pennsylvania, Philadelphia, PE, USA. |
| Local co-chair             | The Sixth International Learning Analytics & Knowledge Conference (LAK'16), April 25-29, 2016, The University of Edinburgh, Edinburgh, UK. |
| Web & Communications chair | The Third Annual ACM Conference on Learning at Scale (L@S'16), April 25-26, The University of Edinburgh, Edinburgh, UK.                    |
| Local committee member     | 17th IEEE International Enterprise Distributed Object Computing Conference (EDOC'13), September 9-13, 2013, Vancouver, BC, Canada.         |

#### Conference program committee membership

- |      |  |
|------|--|
| 2017 | The World Conference on Mobile and Contextual Learning (mLearn)      |
| 2017 | The International Conference on Learning Analytics & Knowledge (LAK) |

- 2017 International IEEE Conference on Advanced Learning Technologies and Technology-enhanced Learning (ICALT)
- 2016 – 2017 The Annual Conference on Learning with MOOCs (LWMOOCs)
- 2016 – 2017 The International Conference on Innovation, Practice, and Research in the Use of Educational Technology in Tertiary Education (ASCILITE)
- 2016 The International Conference on Wearable Technologies, Knowledge Development, and Learning (aWEAR)
- 2014 – 2016 The European Conference on Technology Enhanced Learning (EC-TEL),
- 2012, 2014 The FTRA International Symposium on Advances in Computing, Communications, Security, and Applications (ACSA)
- 2012 – 2014 The FTRA International Conference on Future Information Technology (FutureTech)
- 2012 – 2015 The International Conference on Evolving Internet (INTERNET)

**Other committee membership**

- 2017 Fifth Spanish Learning Analytics Summer Institute (LASI Spain 2017)
- 2017 FutureLearn Workshop at the Seventh International Conference on Learning Analytics & Knowledge (LAK'17)
- 2014 – 2016 Doctoral Consortium at the European Conference on Technology Enhanced Learning (EC-TEL)
- 2015 Joint European Summer School on Technology Enhanced Learning (JTEL)

**External reviewer**

- 2015 – 2017 The Annual ACM Conference on Learning at Scale (L@S)
- 2015 – 2016 The International Learning Analytics & Knowledge Conference (LAK)
- 2015 The Annual Conference on Learning with MOOCs (LWMOOCs)
- 2013 – 2015 The International Conference on Educational Data Mining (EDM)
- 2014 The Conference on Empirical Methods on Natural Language Processing (EMNLP)
- 2013 The Eight European Conference on Technology Enhanced Learning (EC-TEL)
- 2012 The International Conference on Computer Science and Software Engineering (CASCON)
- 2012 The International Conference on Software Language Engineering (SLE)
- 2012 The IEEE International Enterprise Distributed Object Computing Conference (EDOC)
- 2012 The International Conference on Web Engineering (ICWE)

**PROFESSIONAL ORGANIZATIONS**

**Governance**

- 2017 – Present **Executive committee member**  
Society for Learning Analytics Research (SoLAR) [solaresearch.org](http://solaresearch.org)

## Membership

- InterLab [interlab.me](http://interlab.me)
- Association for Computing Machinery (ACM) [www.acm.org](http://www.acm.org)
- Institute of Electrical and Electronics Engineers (IEEE) [www.ieee.org](http://www.ieee.org)
- International Educational Data Mining Society (IEDMS) [www.educationaldatamining.org](http://www.educationaldatamining.org)
- International Society for Artificial Intelligence in Education (IAIED) [iaied.org](http://iaied.org)
- Society for Learning Analytics Research (SoLAR) [solaresearch.org](http://solaresearch.org)
- ACM Special Interest Group on Computer Science Education (ACM SIGCSE) [sigcse.org](http://sigcse.org)
- IEEE Education Society (IEEE EDU) [ieee-edusociety.org](http://ieee-edusociety.org)
- GOOD OLD AI Research Network (GOAI) [goodoldai.org](http://goodoldai.org)

## JOURNAL REVIEW BOARD

- Big Data & Society (BDS) [bds.sagepub.com](http://bds.sagepub.com)
- Journal of Learning Analytics (JLA) [learning-analytics.info](http://learning-analytics.info)
- IEEE Transactions on Learning Technologies (IEEE TLT) [www.computer.org/web/tlt](http://www.computer.org/web/tlt)
- Computers & Education (C&E) [www.journals.elsevier.com/computers-and-education](http://www.journals.elsevier.com/computers-and-education)
- Internet and Higher Education (INTHIG) [www.journals.elsevier.com/the-internet-and-higher-education](http://www.journals.elsevier.com/the-internet-and-higher-education)
- Journal of Computing in Higher Education (JCHE) [link.springer.com/journal/12528](http://link.springer.com/journal/12528)
- The International Journal of Artificial Intelligence in Education (IJAIED) [www.springer.com/computer/ai/journal/40593](http://www.springer.com/computer/ai/journal/40593)

## BOOK REVIEWING

- Lang, C., & Siemens, G. (Eds.). (in-press). *Handbook of Learning Analytics and Educational Data Mining*. Edmonton, AB: Society of Learning Analytics.
- Alejandro Pena-Ayala (Ed.). (in-press). *Learning analytics: Fundamentals, Applications, and Trends: A View of the Current State of the Art*. New York, NY: Springer International Publishing.
- Rafik Naccache (2015). *Clojure Data Analysis Cookbook*. Birmingham, UK: Packt Publishing.
- Eric Rochester (2015). *Clojure Data Structures and Algorithms Cookbook* (2nd ed.). Birmingham, UK: Packt Publishing.

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## TEACHING AND STUDENT SUPERVISION

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### INVITED LECTURES

- Kovanovic, V. (2016). Inquiry-based learning & MOOCs: challenges & opportunities. Guest lecture at the *CI 5330: Special Topics on Learning Technologies* graduate course. March 1, 2016, University of Minnesota, MN, USA.
- Kovanovic, V., and Joksimovic, S. (2014). DALMOOC social network analytics. Guest lecture for the *Data, Analytics and Learning Massive Open Online Course (DALMOOC)*, November 10, 2014, The University of Texas at Arlington, TX, USA. Recording available at <https://www.youtube.com/watch?v=GUUaP39VpLI>

### TUTORIAL ORGANIZATION:

- Three-day tutorial “**Topic modeling**,” organized as the part of the Third Learning Analytics Summer Institute (LASI’16), June 27-29, 2016, The University of Michigan, Ann Arbor, MI, USA.

- Half-day tutorial “**Introduction to data mining for educational researchers,**” organized as the pre-conference event of the Sixth International Learning Analytics and Knowledge Conference (LAK’16), April 26, 2016, The University of Edinburgh, Edinburgh, UK.
- Half-day tutorial “**Topic modeling for learning analytics researchers,**” organized as the pre-conference event of the Fifth International Learning Analytics and Knowledge Conference (LAK’15), March 17, 2015, Marist College, Poughkeepsie, NY, USA.
- Half-day tutorial “**Introduction to data mining for educational researchers,**” organized as the part of the Second Learning Analytics Summer Institute (LASI’14), June 30, 2014, Harvard University, MA, USA.

## TEACHING EXPERIENCE

- Spring 2017 **Tutor Marker**, INF2B Algorithms, data structures and learning, School of Informatics, The University of Edinburgh.
- Summer 2014 **Teaching Assistant**, IAT 334 Interface Design, School of Interactive Arts and Technology, Simon Fraser University.
- Spring 2014, Fall 2014  
Spring 2013, Fall 2013 **Teaching Assistant**, IAT 201 Human-Computer Interaction & Cognition, School of Interactive Arts and Technology, Simon Fraser University.
- Fall 2006, Spring 2007  
Fall 2007 **Teaching Assistant**, Principles of Programming (Second-year course), School of Organizational Sciences, The University of Belgrade.

## RESEARCH STUDENT SUPERVISION

### Undergraduate student co-supervisor

- Asseem Narang Fourth year honors project: “*Real-time Analytics for Massive Open Online Courses.*” (2017). School of Informatics, The University of Edinburgh.
- Ellen Blaine (visiting student from Stanford University) Course project: “*Automation of a Coding Scheme for Content Analysis of Student Self-reflections.*” (2016). School of Informatics, The University of Edinburgh.

### Masters student co-supervisor

- Jialun Wu Masters project: “*Mining Reddit to identify factors that describe prominent links between different communities.*” (in progress). School of Informatics, The University of Edinburgh.
- Marko Vidoni Masters project: “*Mining GitHub to detect factors that predict projects with vibrant communities.*” (in progress). School of Informatics, The University of Edinburgh.
- Sílvia Sanromà Martorell Masters project: “*Mining Stack overflow to identify collaboration patterns and user reputation.*” (in progress). School of Informatics, The University of Edinburgh.
- Ogechi Onuoha Masters project: “*Real-time Analytics for Massive Open Online Courses.*” (2016). School of Informatics, The University of Edinburgh.
- Michail Charalampos Masters project: “*A/B Testing with Massive Open Online Courses.*” (2016). School of Informatics, The University of Edinburgh.

- Filippou Katerinopoulos

Masters project: “A/B Testing with Massive Open Online Courses.”  
(2016). School of Informatics, The University of Edinburgh.

## REFEREES

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