

# Irma Ravkic

## Resume

☎ (1) 424-371-4152

✉ iravkic@msmu.edu

🌐 <https://irmaravkic.wixsite.com/irmar>

in <https://www.linkedin.com/in/irmaravkic/>

## Work Experience

- 2018-now** **Assistant professor**, *Mount Saint Mary's University, Los Angeles*  
computer science professor / co-PI / developing a CS program
- 2016-2018** **Research scholar**, *University of California, Los Angeles (UCLA)*  
computer science / machine learning for neurology applications / image processing
- 2011-2016** **Research assistant**, *KU Leuven, Belgium*  
computer science / artificial intelligence / knowledge representation & discovery

## Education

- 2011-2016** **PhD in computer science**, *KU Leuven, Belgium*  
*Title* Probabilistic logical models for large-scale hybrid domains  
*Mentors* prof.dr. Jesse Davis & PhD Jan Ramon  
*Keywords* artificial intelligence, statistical relational learning, machine learning, probabilistic graphical models
- 2010-2011** **Master of artificial intelligence**, *KU Leuven, Belgium*
- 2004-2009** **Bachelor of Electrical engineering**, *The University of Tuzla, Bosnia and Herzegovina*

## Awards & Scholarships

- 2016** **Google travel grant for the Google Inside Look event in Zürich, Switzerland**
- 2016** **EurAI travel grant for ECAI 2016 conference in The Hague**
- 2015** **Google Anita Borg Memorial Scholarship 2015 recipient**, *Currently Women Techmakers*  
Awarded to outstanding computer science students
- 2014** **IDA 2014 best video prize**, Intelligent Data Analysis (IDA) Conference Video Prize, October 2014, Leuven  
Awarded to the best video advertising the submitted poster.
- 2013** **Jury award for "What if GPS's had an attitude?" video**  
KU Leuven competition for promoting computer science through comical videos. Made together with Daniele Alfarone, Antoine Adam, prof. Danny De Schreye and prof. Stefan Vandewalle. View [here](#).
- 2010-2011** **JoinEU-See scholarship funded by the European Commission for full-degree master of artificial intelligence in Belgium**, *Currently JoinEU-SEE PENTA*  
Completed Master of Artificial Intelligence @ KU Leuven
- 2009** **Golden plaque of Tuzla University**  
Awarded to top class students (average grade over all study years  $\geq 9.5$  out of max. 10) ~ top 5%

## Teaching & Mentoring

### Teaching assistant at KU Leuven

- 2012-2016 Fundamentals of Artificial Intelligence, [H02A0A](#)
- 2011-2014 Knowledge Representation, [H02C3A](#)

## Teaching at MSMU

- 2018 Programming (C++)
- 2018 Structure and Comparison of Programming Languages
- 2019 Coding For All (Python)
- 2019 Computers Under the Hood
- 2020 Intro to Data Science
- 2020 Software Development (Java + Python)

## Student projects supervision

- Jesse Cai, Jorge Fuentes, "Predicting medical phrases with document and topic vectors", 2017
- Haozhuo Huang, Summer research experience, 2017

## Master thesis supervision

- Dries Van Daele, "Learning and mining from healthcare data", in collaboration with AGFA, Gent, 2012
- Minisha Murugan, "Detecting Changes in Movement Patterns using Machine Learning and Data Mining", in collaboration with Human Movement Biomechanics Research Group, Department Kinesiology, KU Leuven, 2013
- Benjamin Wittevrongel, "Development of an automatic system for detecting quality of movement for prevention and rehabilitation" in collaboration with Human Movement Biomechanics Research Group, Department Kinesiology, KU Leuven, 2014 (accepted to Workshop on Machine Learning in Life Sciences, ECML-PKDD 2015)
- Vincent Vankrunkelsven, "Machine learning for ECG with low power consumption", in collaboration with IMEC, Leuven, 2014
- Wouter De Bruyn, "Movie recommendations: you are what you watch", 2014/2015
- Bart Vanderlocht, "Machine learning: a new method for fatigue-detection in runners", 2015/2016

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## Service

### Organization

- 2013 Co-organized Spring meetings on Mining and Learning (SMiLe) + WOG event - ML group**  
KU Leuven, Belgium
- 2012 Co-organized (webmaster) Spring Workshop on Mining and Learning 2012 (SMiLee)**  
KU Leuven, Belgium

### Outreach

- 2015-present Lead translator and proofreader for code.org project**, Bosnian & Croatian  
Project promoting programming to young generations all over the world. Everyone can code!
- 2015 Mock interview organizer**, part of Google Anita Borg initiative  
Belgium & Bosnia and Herzegovina
- 2015 Funding organizer via Google for Women in Tech event**  
Belgium

**2015 Promoting Google Anita Borg scholarship to female students at KU Leuven (presentation)**  
Belgium

**2015 Participant in a brainstorming session of an education project (Toga) connecting undergraduate students with their future self image as computer science graduates**  
KU Leuven, Belgium

#### Media Coverage

**2016 An article in the main news portal of Bosnia and Herzegovina, *about me winning the Google Anita Borg scholarship***

**2016 An article in Tuzla's (my hometown) main news portal, *a motivational interview for girls to take on CS studies***

**2016 An interview for IT girls Bosnia and Herzegovina initiative supported by the UN, *for inspiring young women to do computer science***

#### Committee

**2011-2015 Teaching assistant member of program committee for master of artificial intelligence program**

Computer Science Dpt., KU Leuven

**2010-2011 Student member of the program committee for master of artificial intelligence program**

Computer Science Dpt., KU Leuven

**2010 Student member of the master of artificial intelligence program subcommittee for online student evaluation**

Computer Science Dpt., KU Leuven

#### Student Services

**2012-2015 Ombuds for the master of artificial intelligence program**

KU Leuven, Belgium

**2013 Created a promotional video for student robotics project**

Computer Science Dpt., KU Leuven

#### Reviewing

**2014, 2015, 2016, 2017 Reviewer for the American Medical Informatics Association (AMIA)**

**2014 Reviewer for ECML/PKDD 2014, France**

**2014 Reviewer for ILP 2014 Special Issue for Machine Learning Journal, France**

**2015 Reviewer for StarAI workshop, Amsterdam, The Netherlands**

**2015 Reviewer for AAAI 2015**

**2016 Program committee member for IJCAI 2016**

**2016 Program committee member for ECAI 2016**

**2017 Program committee member for AAAI 2018**

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## Publications & conferences

### Journal papers

- 2017 Irma Ravkic\*, Martin Znidarsic\*, Jan Ramon, Jesse Davis "Graph sampling with applications to estimating the number of pattern embeddings and the parameters of a statistical relational model", in Data Mining and Discovery (DAMI) journal, 2017, \*shared autorship
- 2015 Irma Ravkic, Jan Ramon, Jesse Davis, "Learning relational dependency networks in hybrid domains" In Machine Learning Journal (Special Issue of ECML PKDD 2015, Porto, Portugal)

### Conference papers

- 2016 Davide Nitti\*, Irma Ravkic\*, Jesse Davis, Luc de Raedt "Learning the structure of dynamic hybrid relational models", in the proceedings of the 22nd European Conference on Artificial Intelligence ECAI 2016, The Hague, the Netherlands, \*shared autorship
- 2012 Irma Ravkic, Jan Ramon, Jesse Davis, "Hybrid logical Bayesian networks", Late Breaking Papers proceedings of the 22nd International Conference on Inductive Logic Programming 62-67, 2012

### Worskhop papers & abstracts

- 2015 Benjamin Wittevrongel\*, Irma Ravkic\*, Wannes Meert, Jesse Davis, Tim Gerbrands, Benedicte Vanwanseele "Predicting gait retraining strategies for knee osteoarthritis", Workshop on Machine Learning in Life Sciences, ECML-PKDD 2015, Porto, Portugal \*shared authorship
- 2017 Irma Ravkic, Fabien Scalzo, "Incremental spectral regression with fixed-size memory", SoCal Machine Learning Symposium 2017, University of Southern California, Los Angeles, California (accepted poster)
- 2017 Irma Ravkic, Fabien Scalzo, "Incremental spectral regression with fixed-size memory", Women in Machine Learning workshop 2017, Long Beach, California (accepted poster)

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## Languages

Self-assessment European level CEFR (C2 maximum evaluation)

		Understanding		Speaking		Writing
		Listening	Reading	Interaction	Production	
Bosnian (Serbo-Croatian)	<b>mother tongue</b>	-	-	-	-	-
English	<b>proficient</b>	<i>C2</i>	<i>C2</i>	<i>C2</i>	<i>C2</i>	<i>C2</i>
French	<b>elementary</b>	<i>B1</i>	<i>B2</i>	<i>A2</i>	<i>A2</i>	<i>A1</i>
Dutch	<b>elementary</b>	<i>B2</i>	<i>B2</i>	<i>A2</i>	<i>A2</i>	<i>B1</i>