



## Personal information

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**Nationality(-ies)** Serbian and Canadian  
**Date of birth** Oct 3 1990  
**Gender** female

## Education and training

current status	PhD candidate at Potioc team, Inria Bordeaux and CRNL team, Inserm Lyon
subject of research	Inria - Computer science/ Human Computer Interaction; Inserm - Neuroscience and Health research
PhD topic	Computational Modeling of users skills and states to optimize BCI training tasks
Grant/Scholarship	Inria BCI-Lift national project
Scientific visit	Research Fellow in IDC Herzilya, in Advanced Virtual Lab (invited by Doron Friedman, project financed by Joy Ventures)
subject of research	Detecting bio-markers of stress and phobias in Virtual Reality
Place and Date	Doctoral School of Bordeaux, January 2016 - July 2019
status	Intern at Inria Sophia-Antipolis, April-August, 2015
subject of research	Jitter Adaptive Dictionary Learning for multi-channel EEG data
Grant/Scholarship	European master scholarship (12 months) - <b>BASILEUS V</b>
Place and Date	Sophia Antipolis University in Nice, France; 2014 – 2015
Title of qualification awarded	<b>MSc in Computational Biology and Bio-Medicine</b> (September 2015)
Principal subjects covered	Final Student Project - Detecting bursts in Retinal Waves, Signal analysis, Algorithms in structural biology, Neuron dynamics, Modeling gene regulatory networks, Forward and Inverse problems etc
Grant/Scholarship	EU exchange scholarship <b>EUROWEB</b>
Place and Date	Free University of Amsterdam, the Netherlands; 2012 – 2013
Principal subjects covered	Thesis Design in Artificial Intelligence - Music generation with Genetic Algorithm; Computer Graphics - OpenGL in java, Data Bases - JDBC; Machine Learning methods, metaheuristics - Genetic Algorithm and Variable Neighbourhood Search

Place and Date  
 Title of qualification awarded  
 Principal subjects covered

Belgrade University, Faculty of Mathematics; 2009 – 2014  
 BSc in Computer Science  
 Programming in C, JAVA; Algorithms and Data Structures; Web design - PHP, CSS, JavaScript; Computer architecture and operating systems; Algebra, Functional Analysis, Numerical Methods, Geometry etc

Place and Date  
 Title of qualification awarded  
 Principal subjects covered

Belgrade "Third Grammar School" (2005–2009) and Music high-school "Kosta Manojlovic" (2006–2010) with music primary school (2000-2006)  
 Grammar school diploma with a B2 certificate of French and Music high-school diploma for a music producer  
 General knowledge of social and natural sciences taught in French (around 15 courses per year) and music classes such as conducting, harmony, piano lessons with sol-fa, music production (audio and midi), acoustics and sound theory (around 13 courses per year)

**Personal skills and competences**

Mother tongue(s)  
 Other language(s)

*Self-assessment  
 European level<sup>(\*)</sup>*

**English**  
**French**  
**Russian, Chinese**

**Serbian**  
 English, French, Chinese, Russian

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
excellent	excellent	excellent	excellent	excellent
excellent	good	excellent	excellent	good
fair	fair	fair	fair	fair

<sup>(\*)</sup> Common European Framework of Reference (CEF) level

Social, organizational skills and competences

February, 2014, organizing a celebration of the Chinese new year in Belgrade, Serbia.  
 In April, 2013 and 2014, member of the Youth in Action program in Mardin, Turkey, making documentaries about Kurdish culture without political suggestions.  
 2013 - producing a film and managing a group of 10 actors for a course at the Vrije University in Amsterdam, called Interactive Multimedia, thanks to which I acquired organizational and management skills.  
 In 2012, in order to collect money for a shelter for kids in Belgrade, I produced, organized and edited a documentary about them, showing their talents and optimism.

Computer skills and competences

3D printing and Laser cutting, and design (Oneshape, Inkscape); Electronics (soldering, arduino programming, analog sensors, microphones etc.); 2013, group projects at Free University of Amsterdam, (i) participation in a Kaggle competition for detecting sounds of blue whales, (ii) research conducted: *Exploring Differences in the Emotional Perception of a Story if it is told by either an Embodied Conversational Agent (ECA) or a Human Being, (an ECA that we created)*  
 2012, Image Processing group project (Sobel Image Edge Detection) using CUDA, in Belgrade University.

Programming skills

Unity (Virtual Reality) – programming in C#,  
 Matlab (Numerical Analysis, Signal and Image processing and analysis, EEGlab, BioSig and Ledalab toolboxes),  
 Python(Pandas, scikit-learn, Signal processing, MNE)  
 R (statistical analysis)  
 Java (Swing, JOGL, JDBC, Jfugue), Web design (CSS, Html, PHP, JavaScript),  
 C (OS- process management; threading; CUDA; compilers - yacc and lex),

Artistic skills and other competences	Clay sculpting, oil painting, drawing portraits -it has been my hobby since I was a child, piano playing (1998 - 2010) and jazz singing, composing and music production (2006-2010) filming and editing, since my first camera – 2002, acting, screen writing and producing films/documentaries (since 2012), with voluntary humanitarian work
Awards	EuroWeb scholarship to study in Amsterdam (Vrije University) 1 academic year (2012 – 2013) Basileus V scholarship to study in Nice (Sophia Antipolis, PolyTech) 1 full year (2014 – 2015) Student Travel Award (Graz BCI Conference, Austria) (2017) Student Award (Asilomar BCI Meeting, California) (2018) Student Award (UbiComp conference, Singapore) (2018)
Invited Talks, Workshops	Organizing conference workshops and finding sponsors for Cortico / JJ-ICON, March Lille, 2019 Invited Lecture on Active Inference, Seminar for Computational Neuroscience Endowing the Machine with Active Inference in a P300 BCI , at Inria Bordeaux, november 2018 Workshop co-organizer: VR/AR in BCI, with F. Putze, T. Mullen, H. Mohammed, D. Krusienski, J. Faller, A. Vourvopoulos, oral presentation: Flow as Optimal User State for Immersion and BCI Performance, at BCI Meeting Asilomar 2018 J.Mladenovic (2018) Invited Talk — Combining physiological sensing and User modeling for intuitive HCI at Intelligent User Interfaces: Eye Tracking and Beyond, Workshop in Haifa University, Israel J.Mladenovic (2018) Invited Talk — Taxonomy for Adaptive BCI: User and Task Modeling at Brain-computer communication: Towards real world applications, BCI Conference in IDC Herzlyia, Israel J. Mladenovic (2017) Invited talk at the Second NeuroFeedback Day in Paris — NExT Neurofeedback and Flow in BCI training
Scientific Outreach	Fête de la science (2 days) Teegi démo, Paris 2017 Fête de la science (2 days) BCI: Controlling Tux penguin with brain, démo, Musée des sciences, Bordeaux 2017 CogTalk, presentation about Flow state in BCIs, to Psychology students, in Bordeaux University (2018) Student Seminary, presentation about BCIs to doctoral students of Bordeaux University (2018)

**Journals:**

A Mjirda, B Jarboui, J Mladenović, C Wilbaut, and S Hanafi (2014) "A General Variable Neighbourhood Search for the Multy-Product Inventory Routing Problem", IMAMAN-2013-0397, published 2014, in IMA Journal of Management Mathematics;

J-M Batail,.. J Mladenovic,.. F Vialatte (2019). EEG neurofeedback research: A fertile ground for psychiatry? L'Encephale

**Chapters:**

J. Mladenovic, J. Mattout, and F. Lotte (2017) Brain-Computer Interfaces Handbook: Technological and Theoretical Advances, Chapter 33: A generic framework for adaptive EEG-based BCI training and operation

F. Lotte, C. Jeunet, J. Mladenovic, B. N'Kaoua, L. Pillette (2018) IET Book 'Signal Processing and Machine Learning for Brain-Machine Interfaces', Chapter 6: A BCI challenge for the signal processing community: considering the human in the loop"

**Conference Papers & Posters:**

J. Mladenovic, J. Frey, M. Bonet-Save, J. Mattout and F. Lotte (2017) The Impact of Flow in an EEG-based Brain Computer Interface, Graz BCI Conference

J. Mladenovic, M. Joffily, J. Frey, F. Lotte, J. Mattout (2017) Endowing The Machine With Active Inference: A generic Framework to Implement Adaptive BCI, NaT Conference

J. Frey, C. Jeunet, J. Mladenovic, L. Pillette, F. Lotte (2017) "When HCI Meets Neurotechnologies: What You Should Know about Brain-Computer Interfaces", Course at ACM CHI

J. Mladenovic (2017) Poster at JJC-ICON in Bordeaux "Exploring adaptive BCI methods to favour user learning and flow state"

J. Mladenović, J. Frey, E. Maby, M. Joffily, F. Lotte, J. Mattout (2018) Active Inference for Adaptive BCI: Application to the P300 Speller, International BCI meeting, May 2018, Asilomar, United States

J. Mladenovic, J. Frey, JR. Cauchard (2018) Dishimo: Anchoring Our Breath, CHI '18 Interactivity - SIGCHI Conference on Human Factors in Computing System, Apr 2018, Montreal, Canada

J. Mladenović, J. Frey, E. Christophe, JA Micoulaud, J Vion-Dury, G Mouglin, R Kronland, S Ystad, M Aramaki (2018) Towards congruent BCI feedback, Poster at Conference JJC-ICON

E. Christophe, J. Frey, R. Kronland, J. Micoulaud, J. Mladenovic, G. Mouglin, J. Vion, S. Ystad, M. Aramaki (2018) Evaluation of a Congruent Auditory Feedback for Motor Imagery BCI, Poster at International BCI meeting, May 2018, Asilomar, United States

Jelena Mladenovic (2018), Considering Gut Biofeedback for Emotion Regulation, UERMMI – UbiComp/ISWC'18 Adjunct, Oct 2018, Singapore