

## PERSONAL INFORMATION

## Matjaž Depolli



21, Podpeč, Videm-Dobrepolje, SI-1312, Slovenija

+386 1 477 3135

matjaz.depolli@ijs.si

<http://e6.ijs.si/~matjaz/>

Skype matjazdepolli

Sex male | Date of birth 10/07/1980 | Nationality Slovenian

## POSITION

## Research assistant at Jožef Stefan Institute

## WORK EXPERIENCE

November 2005 – Present

## Research fellow

Jožef Stefan Institute, Jamova cesta 39, SI-1000 Ljubljana, Slovenija

- local computer cluster administration
- web page administration
- implementation of national and international research projects
- preparation of proposals for national and international research projects
- basic and applicative research in the area of computer science
- mentoring of students
- lead programmer of small team
- algorithm development
- laboratory demonstrator for industrial partners, students and pupils (1h/month)

Business or sector Research

November 2004 – October 2005

## Technical collaborator

National and University Library, Turjaška 1, SI-1000 Ljubljana, Slovenija

- informatics consultant for an international project

Business or sector Research

## EDUCATION AND TRAINING

2010

## Ph.D.

EQF 8

Jožef Stefan International Postgraduate School, Ljubljana, Slovenija

- data mining
- artificial intelligence
- computer graphics

2005

## BS.C. in computer science

EQF 6

Faculty for computer and information science, University of Ljubljana, Slovenija

- informatics
- programming
- computer hardware

1999

## Electronic technician with Matura

EQF 4

Middle school for electrotechnics and electronics, Ljubljana, Slovenija

- electronics
- electrotechnics

## PERSONAL SKILLS

Mother tongue(s) Slovenian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C1	C1	C1
Croatian	B2	B2	A2	B1	B1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user  
[Common European Framework of Reference for Languages](#)

- Communication skills**
- team work: while working in research I have always been involved in team work
  - teaching: I have been actively involved in teaching computer skills throughout my life, I have also led a topic in a summer school for graduate students, composed of several talks and workshops, and several independent lectures for graduate students
  - presenting: I have given countless presentation to various audience sizes up to fifty people, I am regularly presenting the laboratory work to children of primary and secondary schools

- Organisational / managerial skills**
- leadership of small teams: currently a lead programmer for a team of 4 people
  - management of multiple students
  - organisation of work on a shared computer system
  - regular contributor in project work and also led some of the smaller projects

- Job-related skills**
- great programming skills: proficient in programming languages C, C++, Java, Matlab, bash scripts, python, and familiarity with Pascal, assembler, Fortran, Javascript
  - familiarity with content versioning systems, and working knowledge in the use of git
  - basic skills in electronics, originating from middle school and a hobby of working with microcontrollers
  - experience in microcontrollers used for small-scale projects
  - versed in preparation of projects: I have contributed to or led several national and international research project proposals

**Digital competence**

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Levels: Basic user - Independent user - Proficient user  
[Digital competences - Self-assessment grid](#)

- fluent in office suites (Microsoft Office and LibreOffice)
- confident in photo editing software and vector drawing software
- good command of computer-aided design tools
- confident in administration of linux-based computers

- Other skills**
- hobby electronics
  - amateur photography

Driving licence B

## ADDITIONAL INFORMATION

### Selected publications

- Matjaž Depolli, Sandor Szabo, Bogdan Zavalnij. An improved maximum common induced subgraph solver. *Match: communications in mathematical and in computer chemistry*. 2020, 84(1), 7-28. ISSN 0340-6253
- Aleksandra Rashkovska, Matjaž Depolli, Ivan Tomašič, Viktor Avbelj, Roman Trobec. Medical-grade ECG sensor for long-term monitoring. *Sensors*. 2020, 20(6), 1-17. ISSN 1424-8220.
- Roman Trobec, Ivan Tomašič, Aleksandra Rashkovska, Matjaž Depolli and Viktor Avbelj. *Body sensors and electrocardiography*. Springer Briefs in applied sciences and technology, 2018 ISBN 978-3-319-59338-8, ISBN 978-3-319-59340-1. ISSN 2191-530X.
- Matjaž Depolli and Gregor Kosec. Assessment of differential evolution for multi-objective optimization in a natural convection problem solved by a local meshless method. *Engineering optimization*, 49(4):675-692, 2017.
- Gregor Kosec, Matjaž Depolli, Aleksandra Rashkovska, and Roman Trobec. Super linear speedup in a local parallel meshless solution of thermo-fluid problems. *Computers & Structures*, 133:30-38, 2014.
- Matjaž Depolli, Janez Konc, Kati Rozman, Roman Trobec, and Dušanka Janežič. Exact parallel maximum clique algorithm for general and protein graphs. *Journal of chemical information and modeling*, 53(9):2217-2228, 2013.
- Matjaž Depolli, Roman Trobec, and Bogdan Filipič. Asynchronous master-slave parallelization of differential evolution for multiobjective optimization. *Evolutionary Computation*, 21(2):261-291, 2013.
- Aleksandra Rashkovska, Roman Trobec, Matjaž Depolli, and Gregor Kosec. 3-D numerical simulation of heat transfer in biomedical applications. In Salim N. Kazi, editor, *Heat Transfer Phenomena and Applications*. InTech, 2012.
- Janez Konc, Matjaž Depolli, Roman Trobec, Kati Rozman, and Dušanka Janežič. Parallel-ProBiS: Fast parallel algorithm for local structural comparison of protein structures and binding sites. *Journal of Computational Chemistry*, 33(27):2199-2203, 2012.
- Roman Trobec and Matjaž Depolli. Simulated temperature distribution of the proximal forearm. *Comput. Biol. Med.*, 41(10):971-979, October 2011.
- Bogdan Filipič and Matjaž Depolli. Parallel evolutionary computation framework for single- and multiobjective optimization. In Roman Trobec, Marián Vajteršic, and Peter Zinterhof, editors, *Parallel Computing: numerics, applications, and trends*, pages 217-240. Springer London, 2009.
- Matjaž Depolli, Viktor Avbelj, and Roman Trobec. Computer-simulated alternative modes of U-wave genesis. *Journal of Cardiovascular Electrophysiology*, 19(1):84-89, 2008.

### Software projects

- Savvy sensor software: design of wireless protocols, programming
- MobECG Android application: principal designer, lead programmer

## ANNEXES