Curriculum Vitae

PERSONAL INFORMATION

Matjaž Depolli

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

POSITION

Research fellow at Jožef Stefan Institute

WORK EXPERIENCE

November 2005 – Present

Research fellow

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

Current tasks:
- implementation of national and international research and aplicative projects
- preparation of proposals for national and international research and aplicative projects
- basic and applicative research in the area of computer science
- mentoring of students
- algorithm development
- local high performance computer system administration

Past experience:
- web page administration
- lead programmer of a small team
- laboratory demonstrator for industrial partners, students and pupils

Business or sector Research

February 2022 – Present

Assistant professor

University of Novo mesto Faculty of Mechanical Engineering, Na Loko 2, 8000 Novo mesto, Slovenija

- lecturer for the course "Technical thermodynamics" in graduate programme

Business or sector Academia

November 2004 – October 2005

Technical collaborator

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

- 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 hold a course on university, I have also led a topic in a summer school for graduate students, held several talks, workshops, and 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: I have been the lead programmer for a 4-people team for 5 years
- management of multiple students
- organisation of work on a shared computer system
- regular contributor in project work
- a principal investigator for several industrial and international 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
- 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
- photo editing

Driving licence   B

ADDITIONAL INFORMATION

Honours and awards

- One of the recipients of the Puh Certificate of Recognition for significant achievements in the field of medical equipment in 2017, awarded by the Ministry of Education, Science and Sport of the Republic of Slovenia.

Selected publications

- Matjaž Depolli, Jure Slak, Gregor Kosec. Parallel domain discretization algorithm for RBF-FD and other meshless numerical methods for solving PDEs. Computers & Structures, 264:106773, 2022
- Aleksandra Rashkovska, Mitja Jančič, Matjaž Depolli, Janko Kosmač, and Gregor Kosec. Uncertainty assessment of dynamic thermal line rating for operational use at transmission system operators. IEEE Transactions on Power Systems, 37(6):4642--4650, 2022
- 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 Tomašić, Viktor Avbelj, Roman Trobec. Medical-grade ECG sensor for long-term monitoring. Sensors. 2020, 20(6), 1-17. ISSN 1424-8220.
- Roman Trobec, Ivan Tomašić, 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. ISSN 0305-215X, 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