

Tomasz RAK

<https://trak.kia.prz.edu.pl>

trak@kia.prz.edu.pl | (+48)178651767

EDUCATION

AGH UNIVERSITY OF SCIENCE AND TECHNOLOGY

PH.D. IN COMPUTER SCIENCE
2007 | Krakow, Poland

RZESZOW UNIVERSITY OF TECHNOLOGY

M.Sc. IN COMPUTER SCIENCE
1999 | Rzeszow, Poland

SKILLS

PROGRAMMING

C/C++/C# • ASP.NET MVC/Core • PHP • HTML • CSS/LESS/SASS • JavaScript/TypeScrip • Node/Angular/React • Shell sctipts • SQL • Git • MPI library • openMP interface
(Advanced knowledge of Web technologies, distributed computing, high performance computing and script programming)

OPERATING SYSTEMS

Linux • iOS *(Advanced knowledge of computer systems, networks, databases, clusters, webservers, services, cryptography, virtualization and containerization)*

RESEARCH INTERESTS

TARGET TECHNOLOGY DOMAINS

Software engineering • Service-oriented computing • O-O programming • Distributed component-base systems • Database and information systems • Event-base systems

MAIN RESEARCH AREAS

Internet systems architectures • HA and HP clusters • Software and systems engineering • Systems benchmarking, monitoring, simulation and experimental analysis • Analytical and experimental performance modeling • Queueing theory • Petri nets

EXPERIENCE

SCIENCE

RZESZOW UNIVERSITY OF TECHNOLOGY | PH.D. ENG., ASSIST. PROF.
1999- | Rzeszow, Poland **RUT** (Research Asst. & Students Teacher)
I work on the mechanisms of the Web programming, distributed systems performance analysis and computer networks.

AGH UNIVERSITY OF SCIENCE AND TECHNOLOGY | PH.D. ENG.
2005- | Krakow, Poland **AGH** (Research Asst.)

Professor **Prof. Jan Werewka** and my common research work is concern on the architectures of Web-based systems.

RESEARCH AND DEVELOPMENT

SOFTTEL SP. Z O.O. | SOFTWARE AND SYSTEM ARCHITECT
2002- | Rzeszow, Polska **Softtel**

Implementation of an innovative system of comprehensive bank service.

ADVANCED TECHNOLOGY SYSTEMS INTERNATIONAL | SOFTWARE AND SYSTEM ARCHITECT

2002-2003 | Krakow, Poland **ABS**
Design of the system clustered Web application.

SOFTSYSTEM SP. Z O.O. | EXPERT IN THE USE OF IT SOLUTIONS • PROJECT MANAGEMENT

2016-2020 | Rzeszow, Polska **SoftSystem**
Designing solutions for high-performance Web clinical software for hospitals and medical laboratories (POIR.02.01.00-00-00-0438/16 project).

SOFTSYSTEM SP. Z O.O. | EXPERT IN THE USE OF IT SOLUTIONS • ARCHITECT OF EXPERT SYSTEM PROTOTYPE

2020-2021 | Rzeszow, Polska **SoftSystem**
R&D works on the development of an expert system for the analysis of data obtained from breast cancer tissue using nuclear magnetic resonance imaging (RPPK.01.02.00-18-0012/18 project).

SOFTSYSTEM SP. Z O.O. | INTERN IT IN THE ORGAN TRANSPLANTATION PROJECT

2021-2022 | Rzeszow, Polska **SoftSystem**
Risk stratification in organ transplantation process.

SOFTSYSTEM SP. Z O.O. | SCIENTIFIC DIRECTOR AT THE STAGE OF A RESEARCH PROJECT OF RESEARCH AND DEVELOPMENT CENTER

2022 | Rzeszow, Polska **SoftSystem**
Preparation of a prototype of an IT laboratory system available in the SaaS model.

AFFILIATIONS

Queueing theorists list: **pos. 1541**

RUT expert: **Informatics**

LINKS

WoS:// **G-1895-2012**

ORCID:// **0000-0002-9299-2216**

DBLP:// **Tomasz Rak**

Scopus:// **Author ID: 34977412000**

Google Scholar:// **Tomasz Rak**

ResearchGate:// **Tomasz_Rak**

LinkedIn:// **tomasz-rak-50775859**

GITHUB REPOSITORIES

2023:// **66**

2022:// **263**

2021:// **47**

2020:// **18**

2019:// **113**

ARTICLES AND BOOKS

- **52** articles: scientific (36), popular science (13) **publications** (*National and international*)
- **13** books about programming, computer systems and computer networks: **Helion** (10), **PWN** (1), supporting materials (2)) (*National*)

H-INDEX

Publons (Web of Science) : 6

• **Scopus** : 7 • **Google Scholar** : 9 •

ResearchGate : 8

PARTICIPATION IN

CONFERENCES

2022 | **CHSN**

2020 | **ICICEE**

2019 | **CN**

2017 | **CN**

2014 | **ISCIS** **FedCSIS**

2009 | **CEE-SET**

2008 | **IMCSIT**

INTERNATIONAL INSTITUTIONS

AAL PROGRAMME | EXPERT

2019- | Brussels, Belgium **AAL**

NATIONAL INSTITUTIONS

NATIONAL AGENCY FOR ACADEMIC EXCHANGE | EXPERT

2019- | Warsaw, Poland **NAWA**

FOUNDATION FOR POLISH SCIENCE | EXPERT

2019- | Warsaw, Poland **FNP**

MINISTRY OF ENTREPRENEURSHIP AND TECHNOLOGY | EXPERT

2018- | Warsaw, Poland **MPiT**

NATIONAL INFORMATION PROCESSING INSTITUTE - NATIONAL RESEARCH INSTITUTE | EXPERT

2018- | Warsaw, Poland **OPI PIB**

MINISTRY OF ECONOMY/MINISTRY OF INVESTMENT AND DEVELOPMENT/MINISTRY OF DEVELOPMENT

2015- | Warsaw, Poland **MiR**

POLISH AGENCY FOR ENTERPRISE DEVELOPMENT | EXPERT

2016- | Warsaw, Poland **MC**

MINISTRY OF DIGITAL AFFAIRS | EXPERT

2015- | Warsaw, Poland **MC**

PROJECT CENTRE DIGITAL POLAND | EXPERT

2014- | Warsaw, Poland **CPPC**

NATIONAL CENTRE FOR RESEARCH AND DEVELOPMENT | EXPERT

2009- | Warsaw, Poland **NCBiR**

CERTIFICATIONS

APMG-INTERNATIONAL PRINCE2 CERTIFICATION

- APMG Foundation PRINCE2 Certificat **P2R/994137**
- APMG Practitioner PRINCE2 Certificat **P2R/542120**

CENTRAL ANTI-CORRUPTION BUREAU

- Corruption in public administration
- Corruption in business
- Social effects of corruption

AWARDS

2022 |

Rector's RUT science award

2017 |

Medal of Commission of National Education

2016 |

3th

Rector's RUT individual award

2009,2008 |

3th

Rector's RUT team and individual awards

2004-2006 |

2nd

Rector's RUT team awards

2003 |

1st

Rector's RUT individual award

ACCOMPLISHMENTS

- 2014-2020 | Polish Expert of European Union national programmes:
Operational Programme Smart Growth (POIR) • Operational Programme Digital Poland (POPC) • The European Funds for Smart Economy (FENG)
- 2006-2007 | The modeling and analysis of interactive Internet systems realizing the service of high - frequency offers (National grant **3 T11C 022 30-2006**)

- The conference Technical Program Committee/International Advisory Committee:

2023	ICNS	ICACDS	ICDCECE	CNCIT				
2022	ICINT	ICDSIS	ICDCECE	ICNS	ICACDS	ICIEA	CECNet	ISAI
	UBICOMM	ICICSA	ICEI	CHSN	ICMNW	ICATIECE		
2021	ICDCOT	ICACDS	CN	ICNS	CHSN	CONSILIO	MIND	ICMNWC
	CSCNS	MysuruCon	ICICA					
2020	ICEECCOT	ICACDS	CN	ICNS	CHSN	CONSILIO	MIND	ICISSC
	ICACI	AEMIT	ISAIC	ICCTC				
2019	ICEECCOT	ICACDS	CN	ICAIT	ICATIECE	CTCE		
2018	ICEECCOT	ICACDS	CN					
2017	ICEECCOT		CN	CSMA				
2016	ICEECCOT	ICACDS		CSSR	CNCT			

- Book/Journal Reviewer:

2023	Entropy				
2022	Processes 0.41 SJR	Informatics 0.45 SJR	Mining	IJERPH	
	Sensors	Sustainability	AEI		
	Network	Electronics	Applied Sciences		
	AppliedMath				
2021	SCS	PUC 0.42 SJR	Mathematics 0.5 SJR		
	ARJOM				
		Technologies			
2020	JAMCS	APJCP 0.51 SJR	MM 0.32 SJR		
	JCS 0.16 SJR	JS 0.39 SJR	CSIT		
2019	AJPS	CJAST	CAI 0.19 SJR		
2018	Measurement 0.72 SJR				

- Book/Journal Guest Editor:

2023	CEE IF: 3.818	Electronics IF: 2.690		
2022	PRL (Elsevier) IF: 4.757			
2020	MM (Elsevier) IF: 1.525	Atlantis Press	IET	IGI Global

- Author of ICT Exams:

2011	Network Administration	Linux
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