# **BRIEF CURRICULUM VITAE**



### Dr Zoltán Gál

Date of birth: 2nd of June 1966

Citizenship: Hungarian

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#### **Positions**

2023 - professor

University of Debrecen, Faculty of Informatics, Department of Information

Systems and Networks, 4028 Debrecen, Kassai str. 26.

2018 - associate professor

University of Debrecen, Faculty of Informatics, Department of Information

Systems and Networks, 4028 Debrecen, Kassai str. 26.

2016 - 2018 assistant professor

University of Debrecen, Faculty of Informatics, Department of Information

Systems and Networks, 4028 Debrecen, Kassai út 26.

2015 - head

University of Debrecen Chancellery, Supercomputer (HPC) Center,

Kassai str. 26, 4028 Debrecen

2006 - 2015 director

University of Debrecen TEK, Center of Information Technology, Egyetem sqr.

1, 4032 Debrecen

2001 - 2005 director

University of Debrecen, Center of Information Technology, Egyetem sqr. 1,

4032 Debrecen

1993 - 2000 head of department

Lajos Kossuth University, Information Technology Service Center,

Egyetem sqr. 1, 4032 Debrecen

1991 - 1993 computer scientist

Lajos Kossuth University, Information Technology Service Center,

Egyetem sqr. 1, 4032 Debrecen

#### Studies, further training

19.05.2021 – 24.06.2021	Acquiring instructor-level skills and authorization for a related university subject: Cisco Certified Internet of Things (IoT), Internet of Things - Connecting Things HTTP Alapítvány, Csörsz str. 45, 1123 Budapest
19.05.2021 – 19.08.2021	Acquiring instructor-level skills and authorization for a related university subject: Cisco Certified Internet of Things (IoT), Internet of Things – Big Data HTTP Alapítvány, Csörsz str. 45, 1123 Budapest
01.07.2021 – 15.08.2021	Acquiring instructor-level skills and authorization for a related university subject: Cisco Certified Network Professional (CCNP), Switching and Routing HTTP Alapítvány, Csörsz str. 45, 1123 Budapest

19.05.2021 – 19.08.2021	Acquiring instructor-level skills and authorization for a related university subject: Cisco Certified Network Professional (CCNP), IT networks HTTP Alapítvány, Csörsz str. 45, 1123 Budapest
30.06.2018	Habilitation, IT sciences Faculty of Informatics, University of Debrecen, Kassai str. 26, 4028 Debrecen
30.06.2010	PhD degree, Informatics Faculty of Informatics, University of Debrecen, Kassai str. 26, 4028 Debrecen
01.10.2006 – 28.02.2010	Acquiring instructor-level skills and authorization for a related university subject: Cisco Certified Network Professional (CCNP), IT networks Óbuda University, Bécsi str. 96/B, 1034 Budapest
01.09.1999 – 28.02.2006	Acquiring instructor-level skills and authorization for a related university subject: Cisco Certified Network Associate (CCNA), IT networks Óbuda University, Bécsi str. 96/B, 1034 Budapest
01.09.1994 – 30.06.1997	PhD training (absolutory), news technology, IT, electronics Budapest University of Technology and Economics, Faculty of Electrical Engineering and Informatics, Műegyetem rkp. 3-9., 1111 Budapest
15.09.1985 – 29.06.1990	MSc. certified IT and electrical engineer (IT, electronics, hardware, software)
	"Politehnica" Technical University of Timisoara, Faculty of Automation and Computers, Bulevardul Vasile Parvan, 2., 300223 Timisoara

Subjects taught in Hungarian and English at the University of Debrecen (1991 – 2022)

Computer architectures (HU, 30 semesters)

Programming of Cisco network devices (HU, 26 semesters)

Cisco Advanced Switching and Routing (HU, 11 semesters)

High-speed local and urban networks (HU, 13 semesters)

New trends in hardware development (HU, 1 semester)

IP-based communication networks and systems (HU, 1 semester)

Multimedia networks (HU, 1 semester)

Computer network architectures (HU, 10 semesters)

Introduction to new network communication technologies (HU, 5 semesters)

Internet of Things systems and technologies (HU, 6 semesters)

Management of data network systems (HU, 4 semesters)

Advanced switching and routing 1 (CCNP1) (EN, 5 semesters)

Advanced switching and routing 2 (CCNP2) (EN, 4 semesters)

High Speed Local and Metropolitan Area Networks (EN, 6 semesters)

Network architectures and protocols (EN, 11 semesters)

Introduction the new network technologies (EN, 5 semesters)

Internet of Things systems and technologies (EN, 5 semesters)

Management of Data Network Systems (EN, 5 semesters)

### Research topics

Real-time communication (RTC) on wireless broadband networks (WiBB)

Multimedia Communication (MMC) and Quality of Service (QoS)

Statistical Analysis of High Speed Packet Switching (HSPS)

Sensor Networks (SN), Internet of Things (IoT)

Distributed Computer Systems (DCS)
Parallel Computer Architectures (PCA)
Parallel Computing (PC)

	Parallel Computing (PC)		
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Information technology scientific projects			
2022 -	TKP2021-NKTA (UDBD-Health supported by BigData technology development and operation of a data warehouse), Supercomputer (HPC) research group leader		
2018 - 2021	20248-3/2018/FEKUTSTRAT (BIG DATA: Medical data processing area), Supercomputer (HPC) research group leader		
2012 - 2014	TÁMOP-4.2.2.C-11/1/KONV-2012-0001 (FIRST: Future Internet research from theory to applications), Internet of Things (IoT) subject area leader		
2012 - 2014	TÁMOP-4.2.2.C-11/1/KONV-2012-0010 (HPC-NVL: Supercomputer, the National Virtual Laboratory), University of Debrecen consortium partner manager		
2011 - 2013	TÁMOP-4.1.2.A/1-11/1-2011-0063 (Multiprocessor systems in engineering practice – book writing), project member (book writer)		
Information techn	ology system projects		
2017 - 2019	InnoHPC H2020 EU international supercomputing service for TransDanube Program countries, expert member		
2010 -	Supervision of the supercomputer system of the University of Debrecen, technical leader		
2011 - 2014	HURO/1101 international IT project with the Technical University of Timisoara (20 Gb/s institutional firewall, 200 WiFi APs, IP streaming), technical manager of the University of Debrecen consortium leader		
2010 - 2012	HURO/0901/265/1.2.3 international ICT project: University of Debrecen and the University of Oradea (outdoor and indoor WiFi system, 250 AP; institutional multimedia and streaming studio), technical manager of the University of Debrecen consortium leader		
2009 - 2010	Development of the supercomputer (HPC) center of the University of Debrecen (data center room, HPC procurement), technical coordinator		
2009 - 2012	HURO/0802/012_AF international ICT project: University of Debrecen and University of Oradea (VPN; indoor WiFi, 150 AP; over Internet internal and inter-institutional telephone system), technical manager University of Debrecen consortium leader		
2004 - 2008	University of Debrecen institutional internal VoIP/IP telephone system design and implementation, technical expert		
2006 - 2007	HEFOP 4.1.2 University of Debrecen GE / 10 GE network design and development, technical expert		
2001 - 2005	Design and development of the optical and galvanic network of the University of Debrecen, technical expert		
2001 - 2004	Design and development of Debrecen Communication and Internet eXchange (DCIX), mastermind and designer		
1997 - 1999	Design and development of the ATM backbone network of Debrecen University Association, technical expert		
1994 - 1998	Fiber Distributed Data Interface (FDDI) and optical city network of Universitas Debrecen, operation and technical executive		

1992 - 1999 Planning, Internet integration and operation of Lajos Kossuth University local network, technical expert

1991 - 1992 Development of Lajos Kossuth University BITNET/EARN/Internet mail system, technical executive

# Language skills

First language Hungarian

Other languages	Comprehension		Speaking		Writing
	Listening	Reading	Conversation	Fluent speaking	
English	C1	C1	C1	C1	C1
Romanian	C2	C2	C2	C2	C2
French	A1	A1	A1	A1	-

# Membership in national professional organizations

2022 -	National Supercomputer (HPC) Competence Center, Professional representative of the University of Debrecen
2018 -	IEEE Hungary Joint Chapter of Industrial Electronics and Robotics & Automation Societies, member
2015 -	Hungarian Academy of Sciences Public Board Technical Sciences Department, member
2005 - 2014	HUNGARNET, board member
2005 - 2016	National Information Infrastructure Development Program (NIIFP) Ethics Committee, member
2002 - 2016	National Institute for Information Infrastructure Development (NIIFIP) Networkshop Conference, Program Committee, member
2001 - 2016	National Information Infrastructure Development Program (NIIFP), Technical Council, member

# Memberships in international professional organizations

2017 - 2018	European Committee EuroHPC Program, Hungarian representative
2015 -	Institute of Electrical and Electronic Engineering (IEEE), Internet of Things (IoT) Society, member
2013 - 2014	Internet of Things European Research Cluster (IERC), Hungarian representative
1999 -	Cisco Network Academy Program registered CCNA/CCNP instructor
1997 -	Institute of Electrical and Electronic Engineering (IEEE), Communication Society, member

### Publication activity

Number of scientific publications: 21 ICT conference presentations: 146

Book, chapter of book: 5

Független hivatkozások száma: 156

URL of MTMT database:

https://vm.mtmt.hu/www/index.php?AuthorID=10031874

URL of Research Gate: <a href="https://www.researchgate.net/profile/Zoltan\_Gal">https://www.researchgate.net/profile/Zoltan\_Gal</a>

URL of Google Scholar:

https://scholar.google.hu/citations?user=AUb7\_8EAAAAJ&hl

URL of iDEa Academic Profiles of the University of Debrecen:

https://tudoster.idea.unideb.hu/hu/tudomany/ZGAL

# Public activity

2001 - 2005	Rector's Council of the University of Debrecen, member
2001 - 2005	University Council of the University of Debrecen, member
2001 - 2005	University of Debrecen IT Committee, co-chairman

### Professional awards

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2024	László Kalmár award of the John von Neumann Association
2023	CNAP NetAcad award
2022	HUNGARNET Association award
2021	Certificate of recognition from the OTDK (National Scientific Student Conference) Informatics Science Review Committee
2021	University of Debrecen Faculty of Informatics award
2013	Certificate of appreciation from the President of the University Faculties of the University of Debrecen
2013	Acknowledgment certificate of Transylvanian Hungarian Technical and Scientific Society
2009	Hungarian Communication and Information Science Association "Pollák-Vírág" award
1997	Certificate from the Debrecen Committee of the Hungarian Academy of Sciences

Date: 8th March 2024

Dr. Gál Zoltán