PERSONAL INFORMATION

Tibor Gyimóthy, DSc, Full member of HAS

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Gender Male | Date of birth 25/09/1953 | Nationality Hungarian

PLACE OF WORK, POSITION

2020-	**Head of SZTE research, Artificial Intelligence National Laboratory (MILAB),** University of Szeged, Hungary, 6720 Szeged Árpád tér 2.
2018-2024	**Head of Smart Systems Research Institute,** University of Szeged, Hungary, 6720 Szeged, Dugonics tér 13
2017-2022	**Head of MTA-SZTE Research Group on Artificial Intelligence,** University of Szeged – Hungarian Academy of Sciences, 6720 Szeged, Dugonics tér 13
2010-2018	**Head of Department, Full Professor** - Institute of Informatics, University of Szeged, 6720 Szeged, Dugonics tér 13
2003-2010	**Head of Department, Associate Professor** - Institute of Informatics, University of Szeged, 6720 Szeged, Dugonics tér 13
1996-2003	**Senior Research Fellow** - Research Group of Artificial Intelligence, Hungarian Academy of Sciences - University of Szeged, 6720 Szeged, Dugonics tér 13
1984-1996	**Research Fellow** - Research Group on the Theory of Automata, Hungarian Academy of Sciences – József Attila University, 6720 Szeged, Dugonics tér 13
1975-1984	**Research Assistant** - Research Group on the Theory of Automata, Hungarian Academy of Sciences – József Attila University, 6720 Szeged, Dugonics tér 13

WORK EXPERIENCE

Tibor Gyimóthy's first interest of research was the optimisation of compilers with the aim of reducing the memory and energy consumption of the generated code. Together with Nokia researchers, he published his research results in *ACM Computing Surveys*. Tibor Gyimóthy is five-time committee member of the *International Conference on Compiler Construction*, which is referred to as one of the most important scientific forums in the given field. In 1996, he was the Programme Committee Chair of the conference.

The main scope of Gyimóthy's present research is exploring the quality problems of IT systems, which includes managing security and maintainability problems as well. Tibor Gyimóthy had a major role in developing program slicing methods, which is regarded as the theoretical basis of this research area.

Tibor Gyimóthy is four-time program committee member of the *International Conference on Software Engineering (ICSE), which is* the most significant software engineering conference in the world.

In 2011, Tibor Gyimóthy was elected the Conference Chair of the *European Software Engineering Conference (ESEC)/ ACM Foundations of Software Engineering (FSE).* He has been the supervisor of 18 defended PhD dissertations so far.

EDUCATION AND TRAINING

2025 **Full member of HAS**
Hungarian Academy of Sciences, 1051 Budapest, Széchenyi István tér 9.

2019 **Corresponding member of HAS**
Hungarian Academy of Sciences, 1051 Budapest, Széchenyi István tér 9.

2008 **Doctor of Science, DSc**
Computer Science Software Maintenance Methods
Hungarian Academy of Sciences, 1051 Budapest, Széchenyi István tér 9.

1996 **Doctor of Philosophy, PhD**
Computer Science Attribute Grammars and their Applications
József Attila University, 6720 Szeged, Dugonics tér 13

1984 **Doctor of University**
Computer Science Attribute Grammars and their Applications
József Attila University, 6720 Szeged, Dugonics tér 13

1981 **Master of Science, MSc**
Mathematics and Computer Science
József Attila University, 6720 Szeged, Dugonics tér 13

Mother tongue: Hungarian

Other languages

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	C1	B2	C1	B2
English state accredited intermediate C language exam					

International scientific work

Tibor Gyimóthy has been member of more than 70 international conference programme committees including the *International Conference on Software Engineering,* the *International Conference on Compiler Constructing,* the *International Conference on Software Maintenance,* the *European Conference on Software Maintenance and Reengineering*.
He was the Programme Committee Chair of *the International Conference on Software Maintenance* (2005) and the *European Conference on Software Maintenance and Reengineering* (2002, 2003)
He was the Conference Chair of the *European Software Engineering Conference (ESEC)/ ACM Foundations of Software Engineering (FSE)* in 2011.
Since 2009, he has been member of the *ESEC/FSE* Conference Steering Committee.
He was (1999-2000) Steering Committee member of the *European Joint Conferences on Theory And Practice of Software (ETAPS)*.
He was Editing Committee member (2000-2004) of AI Communications.
As a co-author, he edited two special issues of the leading software engineering journal *IEEE Transaction on Software Engineering*, which was published in 2006.
He was member of the Editing Committee of the *Journal of Software: Evolution and Process*.
In 2009, he was the invited lecturer at the *European Conference on Software Maintenance and Reengineering*.
From 1999 to 2001, he was the Chair of the *IEEE Computer Society Central and Eastern European Initiatives Committee.*

National scientific work

2009-2017	Hungarian Academy of Sciences, Committee of Informatics and Computer Science, Chair
2009-2022	Hungarian Academy of Sciences, Doctoral Committee of Mathematics, member
2011-2018	Hungarian Accreditation Committee – Technical Committee, member
2015-2018	Hungarian Scientific Research Fund – Committee of Mathematics, member
2008-2010	Hungarian Accreditation Committee – Committee of Mathematics, member
2008-2010	Hungarian Scientific Research Fund – Committee of Electrical Engineering and Electronics, member
2006-2008	Hungarian Academy of Sciences, Mathematics and Natural Sciences Board of Trustees

Awards

Best Paper Award of 6 international conferences
“The paper with the greatest scientific impact in the field of software maintenance within the last ten years” – the *International Conference on Software Maintenance*, 2012
Kalmár Prize of the John von Neumann Computer Society, 1997
Széchenyi Fellowship for Professors, 1999-2002
HAS Academic Prize, 2011
Gábor Dénes Prize, 2013
Szent-Györgyi Albert Prize, 2015

Publication metrics

Number of publications: 228
Independent citations: 3381
H-index: 29
Impact factor 42.245
https://m2.mtmt.hu/api/author/10010796

Selected publications

1. Horváth, Ferenc ; Beszédes, Árpád ; Vancsics, Béla ; Balogh, Gergő ; Vidács, László ; Gyimóthy, Tibor Using contextual knowledge in interactive fault localization EMPIRICAL SOFTWARE ENGINEERING 27 : 6 Paper: 150 , 69 p. (2022)
2. Ferenc, Rudolf ; Gyimesi, Péter ; Gyimesi, Gábor ; Tóth, Zoltán ; Gyimóthy, Tibor An automatically created novel bug dataset and its validation in bug prediction JOURNAL OF SYSTEMS AND SOFTWARE 169 Paper: 110691, 20 p. (2020)
3. Ferenc, Rudolf ; Bán, Dénes ; Grósz, Tamás ; Gyimóthy, Tibor Deep learning in static, metric-based bug prediction ARRAY 6 Paper: 100021 , 9 p. (2020)
4. Ferenc, Horváth ; Tamás, Gergely ; Árpád, Beszédes ; Dávid, Tengeri ; Gergő, Balogh ; Tibor, Gyimóthy Code Coverage Differences of Java Bytecode and Source Code Instrumentation Tools SOFTWARE QUALITY JOURNAL 27 : 1 pp. 79-123. , 45 p. (2019)
5. Kertesz, A. ; Pflanzner, T. ; Gyimothy, T. A Mobile IoT Device Simulator for IoT-Fog-Cloud Systems JOURNAL OF GRID COMPUTING 17 : 3 pp. 529-551. , 23 p. (2019)
6. Denys, Poshyvanyk ; Andrian, Marcus ; Rudolf, Ferenc ; Tibor, Gyimóthy Using information retrieval based coupling measures for impact analysis EMPIRICAL SOFTWARE ENGINEERING 14 : 1 pp. 5-32. , 28 p. (2009)
7. Tibor Gyimóthy, Rudolf Ferenc, István Siket Empirical validation of object-oriented metrics on open source software for fault prediction, IEEE TRANSACTIONS ON SOFTWARE ENGINEERING 31:(10) pp. 897-910. (2005)
8. Árpád Beszédes, Rudolf Ferenc, Tibor Gyimóthy, André Dolenc, and Konsta Karsisto. Survey of code-size reduction methods. ACM Computing Surveys, 35(3):223–267. (2003)
9. Tibor Gyimóthy, Árpád Beszédes, and István Forgács. An efficient relevant slicing method for debugging. In ESEC/FSE 1999, Lecture Notes in Computer Science, 1687:303–321. Springer, (1999)
10. Peter, Fritzson; Nahid, Shahmehri; Mariam, Kamkar; Tibor, Gyimóthy. Generalized algorithmic debugging and testing In ACM LETTERS ON PROGRAMMING LANGUAGES AND SYSTEMS (LOPLAS) 1:4 pp. 303-322, 20 p. (1992)