Dr. Fazekas, Gábor, PhD
associate professor
University of Debrecen,
Faculty of Informatics
Department of Information Technology
Address: Kassai út 26, Debrecen, Hungary
Mail: H-4002, P.O.B. 400.
Phone: (+36)(+52) 512900 (ext.) 75330
Fax: (+36)(+52) 512996
GSM: (+36)(+30) 4368857
http: //www.inf.unideb.hu/~fazekasg
e-Mail: fazekas.gabor@inf.unideb.hu

Curriculum vitae

Born June 9, 1952 in the village Szakácsi, Hungary. Nationality: Hungarian. Married, wife teacher, three children (40, 38, 29), two grandchildren (11,9). Graduated in mathematics from the Faculty of Science of Kossuth Lajos University in Debrecen (1971-1976). One semester guest-student at the Faculty of Mathematics of Rostock University (Germany) in 1974. Received an awarded (Sub Auspiciis Rei Publicae Popularis) PhD degree from the Kossuth Lajos University in 1981. Thesis: "Tchebychev-Markov problems as generalized linear programming problems". Passed the candidate of technical sciences exam (in topic: *theoretical foundations of informatics*) at the Institute for Information Transmission Problems (Moscow) in 1990.
Positions held at the Department of Computer Science of Kossuth Lajos University (from 01.01.2000 University of Debrecen): research associate (1976-1981), research fellow (1981-1996); associate professor at the Department of Information Technology (1996–2015); vice director of the Institute of Mathematics and Informatics (1999-2003); vice director of the (faculty level) Institute of Informatics (2003-2004); vice dean of the Faculty of Informatics (2004); director of the Cooperative Research Center in Information Technology (2005-2008).
Part time scholarship at the Institute for Information Transmission Problems (Moscow) in 1988-1992. Visiting professor at the Faculty of Mathematics and Informatics of Paderborn University (Germany) in April - June, 1993 and guest professor in September - October 1995. Senior research fellow at the Faculty of Mathematics and Informatics of Paderborn University (Germany) from November 1995 until November 1998. Visiting professor at the (Jyväskylä Polytechnic) School of Information Technology in October 2002.
More than 40 years ***teaching activity*** in computer science and information technology at the Institute of Mathematics and Informatics of Kossuth Lajos University. The most frequently thought topics are assembly programming, system programming & operating systems, database organization & database management systems, mathematical foundations of computing, digital image processing.
Research interests: computer architectures and systems, coding theory, databases and information systems technology, picture processing and pattern recognition. Co-founder of the Pattern Recognition Research Group at the Department of Information Technology. One patent, two lecture notes, more than 40 other publications (with 90 citations), about 60 lectures on international conferences and seminars, numerous case studies, software licenses. Developer of algorithms and computer programs for (fingerprint) pattern recognition.
Membership: J. Bolyai Mathematical Society (Hungary), J. von Neumann Computer Society (Hungary), IEEE member, IEEE Comp. Soc. Fellow member, editorial board member of the Journal of Applied Mathematics and, the Teaching Mathematics and Computer Sciences.
Language skills: advanced level English, German, Russian (besides native Hungarian).
Awards: *"Medal for merit in higher education"* (from the Minister of Education, 1977); *"Award for outstanding work"* (from the Minister of Education, 1988); "*Doctor Honoris Causa*" (from the University of Oradea, Romania, 2005), "*László Kalmár Award*" (from the John von Neumann Computer Society, 2007)
R&D Projects: Coloring of satellite images (1982), Permutation source coding of digitized voice and images (1983-84), Digital data transmission on public telephone network using common equipment (1985), Fingerprint pattern recognition (1986-87), Optical character recognition (1989), SQC in e-Learning (2005-09).
EU Projects: Tempus JEP102 (Curriculum development, 1990-1993, participant) , Tempus SJEP-09269 (Curriculum development, 1995-1998, project manager), Tempus SJEP-11199 (Integration of the education, 1996-1999, project manager), Tempus SJEP-12179 (Cooperation between academic and business sectors, 1998-2001, participant), Tempus SJEP- 12435 (Curriculum development, 1997-2000, project manager), ERIC (Enhancing Regional ICT Cluster For Regional Development, 2003-2004, local coordinator)

Selected publications of Gábor Fazekas:

[1.] Kálmán Bolla, Tamás Kovács , Gábor Fazekas: *Investigating the Rate of Failure of Asynchronous Gathering in a Swarm of Fat Robots with Limited Visibility,* In book: Artificial Intelligence and Soft Computing, pp.249-256, DOI: 10.1007/978-3-319-07176-3_22, 2014.

[2.] Kálmán Bolla, Zsolt Csaba Johanyák, Tamás Kovács , Gábor Fazekas: *Local center of gravity based gathering algorithm for fat robots*, In: Szerk.: Kóczy LT, Szerk.: Pozna CR, Szerk.: Kacprzyk J Issues and Challenges of Intelligent Systems and Computational Intelligence. Cham: Springer International Publishing, 2014. pp. 175-183. (Studies in Computational Intelligence; 530.)

[3.] Seyed Majid Mousavi, Gábor Fazekas, *Increasing QoS in SaaS for low Internet speed connections in cloud,* DOI: 10.14794/ICAI.9.2014.1.195, Proc. of the 9th International Conference on Applied Informatics, Eger (Hungary), Volume: 2nd, January 2014.

[4.] Bolla Kálmán, Kovács Tamás, Fazekas Gábor: *Gathering of fat robots with limited visibility and without global navigation*, In: Szerk.: Rutkowski Leszek, Szerk.: Korytkowski Marcin, Szerk.: Scherer Rafal, Szerk.: Tadeusiewicz Ryszard, Szerk.: Zadeh Lotfi A, Szerk.: Zurada Jacek M Swarm and Evolutionary Computation. Berlin: Springer - Physica-Verlag, 2012. pp. 30-38.

[5.] Bolla Kalman, Istenes Zoltan, Kovacs Tamas, Fazekas Gabor: *A fast image processing based robot identification method for Surveyor SRV-1 robots*, In: Szerk.: Institute of Electrical and Electronics Engineers Proceedings IEEE/ASME International Conference on Advanced Intelligent Mechatronics. Piscataway: IEEE, 2011. pp. 1003-1009.

[6.] Kálmán Bolla, Tamás Kovács, Gábor Fazekas: *A fast visual perception system based on kin recognition and distance evaluation method in a robot swarm*, A GAMF KÖZLEMÉNYEI 2010/24: pp. 49-61.

[7.] Esmaeili Mahdi · Gabor Fazekas, *Finding Sequential Patterns from Large Sequence Data*, IJCSI International Journal of Computer Science Issues, Vol. 7, Issue 1, No. 1, January 2010.

[8.] Adamkó, A., Arató, M., Fazekas, G., Juhász, I*., Performance evaluation of large-scale data processing systems* . Proceedings of the 7th International Conference on Applied Informatics, January 28–31, 2007. Eger, Hungary, pp. 295-302., 2008.

[9.] Fazekas, G., Bognár, K., Juhász, I., *Co-operative research centre for information technology in Debrecen (ITCRC)*, Proceedings of the 7th International Conference on Applied Informatics, January 28–31, 2007. Eger, Hungary, pp. 7-14., 2008.

[10.] Fazekas, G., Jónás R., *A Scaling and Rotating Invariant Object Matching Algorithm*, Mathematical and Computer Modelling, 38 (2003), pp. 797-801.

[11.] Fazekas G., *An extremum problem for polynomials and bounds for codes with given distance and diameter in polynomial metric spaces,* Mathematical and Computer Modelling, 38 (2003), pp.789-795.

[12.] Fazekas A., Fazekas G., *Fingerprint identification based on dermatological features*, AMAPN (www.emis.de/journals), 18 (2002), pp. 85-94.

[13.] Fazekas, G., Zakaria, Awad, *On some software tools for data mining*, 4th International Conference on Applied Informatics, Eger-Noszvaj, Hungary, 30 August - 3. September, 1999. 1999. pp. 331-336.

[14.] Fazekas, G., Zakaria, Awad, *Data Mining Query Languages,* Technical Report No.: 2001/15 (Preprints No.: 273) Institute of Mathematics and Informastics, University of Debrecen, Hungary 2001, 13 pages.

[15.] Fazekas, G., Zakaria, Awad, *On ODBC-KDD models,* Proc. of the 5th International Conference on Applied Informatics (ICAI01) dedicated to the 70th birthday of Prof. Mátyás Arató and Prof. László Varga, Eger, Hungary, 28. January - 3. February, 2001, pp 237-247.

[16.] Fazekas, G., V.I. Levenshtein, *On upper bounds for code distance and covering radius of designs in polynomial metric spaces,* Journal of Combinatorial Theory, Series A, Vol. 70, No. 2, May 1995, p.267-288.

[17.] Fazekas, G., Kormos, J., *User Interface - Certification and Authentication*, Workflow Management: challenges, paradigms and products, G. Chroust, A. Benczúr (eds), Schriftenreiche der Österreichischen Computer Gesellschaft, 1994., Bd 76, p. 169 - 175.

[18.] Fazekas, G., *On some new bounds for codes with given distance and diameter in polynomial metric spaces*, Bulletins for Applied Mathematics, 953/1994 (LXX), p. 167-172.

[19.] Dömösi, P., Fazekas, G., *On the Constructive Derivation of Automata with Composition*, 2nd Conf. on Automata, Languages and Programming Systems, Salgótarján, Hungary, May 23-26, 1988, K.M. Univ. of Econ., Budapest, DM 88-4, p. 99-103.

[20.] Fazekas, G., *On the extreme points of sets of measures defined by moment inequalities*, Publ. Math., Debrecen, T. 36., 1989., p. 57-64.

[21.] Fazekas, G., *Group codes and picture processing*, Wissenschaftliche Beiträge der Technische Hochschule Wismar, Heft 5.II/88, p. 61-63.

[22.] Fazekas, G., *On the coding of fingerprint images*, Proc. of the International Workshop on Algebraic and Combinatorial Coding Theory, Varna, Sept. 18-24, 1988., p. 63-69.

Further (incomplete) lists of publications of Gábor Fazekas:

https://www.researchgate.net/profile/Gabor_Fazekas/publications

https://vm.mtmt.hu/www/index.php

3rd September 2016