

CURRICULUM VITAE

MGR. PAVEL HOLEČEK, PH.D.

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PRACTICE:

January 2013 - Now	Palacký University in Olomouc , Centre of the Region Haná Development and administration of the information system for academic staff members evaluation
October 2010 - Oct. 2013	Palacký University in Olomouc , Faculty of science, Department of Mathematical Analysis and Applications of Mathematics Post: expert for e-learning deployment and administration

EDUCATION

2008 - 2015	Palacký University in Olomouc , Faculty of Science PhD study program: <i>Applied mathematics</i> PhD. thesis topic: Fuzzy models of multiple criteria evaluation and fuzzy classification.
2007 - 2008	Palacký University in Olomouc , Faculty of Science Master study program: <i>Computer Science</i> Thesis: Software processing of fuzzy evaluation methods.
2003 - 2007	Palacký University in Olomouc , Faculty of Science Bachelor study program: <i>Computer Science</i>

COMPLETED INTERNSHIPS:

April 2012	Institute for research and applications of fuzzy modeling IRAFM , Ostrava, Czech Republic (1 week internship)
March 2011 - June 2011	Technical University in Vienna , Vienna, Austria

PROFESSIONAL ORGANISATIONS MEMBERSHIP:

2014 – present	Member of the Czech Society for Operations Research
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RESEARCH AREAS:

- Fuzzy models of multiple-criteria evaluation, fuzzy classification and their applications.
- Cooperation in the detailed mathematical analysis of the first version of Public Universities Financing Guidelines after 2010.

RESEARCH AND APPLICATIONS:

- Participation in the pilot project testing the possible use of a fuzzy controller for traffic regulation in the Austrian highways. The project was realized in 2011 by Nast Consulting ZT GmbH with cooperation of the Technical University in Vienna.
- Participation in the subsequent project, which studied the possibility of regulating traffic by a fuzzy controller on both highways and secondary roads. The project was carried out by Nast Consulting ZT GmbH in 2013 and 2014.
- Software implementation of the information system for academic staff performance evaluation (IS HAP). The information system is used at faculties of 6 Czech universities.
- Development of the FuzzME software. The software is a software implementation of the multiple-criteria fuzzy evaluation and fuzzy classification methods.
- Application of the FuzzME software for bank clients assessment (in co-operation with the Technical University in Vienna).

PUBLICATIONS

BOOK CHAPTERS:

- HOLEČEK P., TALAŠOVÁ, J., MÜLLER, I.: Fuzzy Methods of Multiple-Criteria Evaluation and Their Software Implementation. Cross-Disciplinary Applications of Artificial Intelligence and Pattern Recognition: Advancing Technologies (editors Mago V. K., Bhatia N.), IGI Global 2012, ISBN13: 9781613504291 , DOI: 10.4018/978-1-61350-429-1.
- TALAŠOVÁ, J., STOKLASA, J., HOLEČEK, P.: Registr uměleckých výkonů a hodnocení výsledků tvůrčí činnosti [Registry of artistic results and evaluation of creative work outcomes] in *Registr uměleckých výstupů 2* (editor Zelinský, M.), NAMU, Praha, 2012, ISBN 978-80-7331-231-2.
- TALAŠOVÁ, J., STOKLASA, J., HOLEČEK, P.: Hodnocení akademických pracovníků v kontextu organizačního klimatu univerzit [Academic staff evaluation in the context of the organization climate of universities]. In GRECMANOVÁ, H., DOPITA, M. ET AL.: *Determinanty organizačního klimatu vysokých škol a fakult*, Olomouc: Univerzita Palackého v Olomouci, 2013, s. 101-114. ISBN 978-80-244-3808-5.

PAPERS IN JOURNALS (with non-zero impact factor):

- STOKLASA, J., TALAŠOVÁ, J., HOLEČEK, P.: Academic staff performance evaluation – variants of models, *Acta Polytechnica Hungarica* 8 (3), 2011, p. 91 – 111, ISSN 1785-8860.
- BEBČÁKOVÁ, I., HOLEČEK, P., TALAŠOVÁ, J.: On the application of the fuzzified Choquet integral to multiple criteria evaluation. *Acta Polytechnica Hungarica* 8 (3), 2011, p. 65-78, ISSN 1785-8860.

PAPERS IN JOURNALS (others):

- HOLEČEK P., STOKLASA, J., TALAŠOVÁ J. (in press): Human resources management at universities - a fuzzy classification approach. *International Journal of Mathematics in Operational Research*.
- HOLEČEK P., TALAŠOVÁ J.: FuzzME: A New Software for Multiple-Criteria Fuzzy Evaluation. *Acta Universitatis Matthiae Belii*, series Mathematics; No. 16 (2010), pp. 35–51

PAPERS IN CONFERENCE PROCEEDINGS:

- HOLEČEK P., TALAŠOVÁ, J.: Multiple-Criteria Fuzzy Evaluation in FuzzME - Transitions Between Different Aggregation Operators. *Proceedings of the 32nd International conference on Mathematical Methods in Economics MME 2014*. Olomouc, Czech Republic, pp. 305-310. ISBN 978-80-244-4209-9.
- J. TALAŠOVÁ, J. STOKLASA, P. HOLEČEK: HR management through linguistic fuzzy rule bases - a versatile and safe tool? *Proceedings of the 32nd International conference on Mathematical Methods in Economics MME 2014*. Olomouc, Czech Republic, pp. 1027-1032. ISBN 978-80-244-4209-9.
- STOKLASA, J., HOLEČEK, P., TALAŠOVÁ, J.: A holistic approach to academic staff performance evaluation – a way to the fuzzy logic based evaluation, *Peer Reviewed Full Papers of the 8th International Conference on Evaluation for Practice “Evaluation as a Tool for Research, Learning and Making Things Better” A Conference for Experts of Education, Human Services and Policy*, 18 – 20 June 2012, Pori, Finland, Tampub, Pori, 2012, ISBN 978-951-44-8859-7
- HOLEČEK P., TALAŠOVÁ, J., STOKLASA J.: Fuzzy classification systems and their applications, *Proceedings of the 29th International Conference on Mathematical Methods in Economics 2011 – part I*, 2011, Praha, Czech Republic, p. 266 – 271, ISBN 978-80-7431-058-4
- ZEMKOVÁ B., TALAŠOVÁ, J., HOLEČEK, P.: Fuzzy Model for Determining the Type of Worker. *Proceedings of the 29th International Conference on Mathematical Methods in Economics 2011 – part II*. 2011, Praha, Czech Republic, p. 768-773, ISBN 978-80-7431-059-1
- HOLEČEK P., TALAŠOVÁ, J.: The Software Support for Multiple-Criteria Evaluation – Various Types of Partial Evaluations Aggregation. *Lecture Notes in Management Science. Proceedings of the 2nd International Conference on Applied Operational Research (Mikael Collan ,Ed), Vol 2*, 2010, pp. 1-5, ISSN 2008-0050
- HOLEČEK P., TALAŠOVÁ, J.: Designing Fuzzy Models of Multiple-Criteria Evaluation in FuzzME Software. *Proceedings of the 28th International Conference on Mathematical Methods in Economics 2010*. Vol 1., pp. 250 – 256, ISBN 978-80-7394-218-2
- TALAŠOVÁ J, HOLEČEK P.: Multiple-Criteria Fuzzy Evaluation: The FuzzME Software Package. *Proceedings of 2009 IFSA World Congress*, July 20-24, 2009, p. 681-686, ISBN 978-989-95079-6-8
- HOLEČEK P., TALAŠOVÁ J.: A New Software for Fuzzy Methods of Multiple Criteria Evaluation. *Proceedings of 8th International Conference of Applied Mathematics APLIMAT 2009*, February 3-6, 2009, p. 387-398, ISBN 978-80-89313-31-0.
- HOLEČEK P., TALAŠOVÁ J.: A New Software for Fuzzy Methods of Multiple Criteria Evaluation. *Journal of Applied Mathematics*; Vol. 2, Number 1, 2009, p. 103-116, ISSN 1337-6365.

CONFERENCES

- HOLEČEK P., TALAŠOVÁ, J.: *Linguistically oriented approach to fuzzy MCDM - the FuzzME software*. 27th European conference for Operational Research EURO 2015, Glasgow (12. 7. - 15. 7. 2015)
- HOLEČEK P.: *Linguistically oriented fuzzy modeling in the FuzzMe software*. International Student Conference on Applied Mathematics and Informatics ISCAMI 2015, Kočovce, Slovakia (23.4. - 26.4. 2015).
- HOLEČEK P., TALAŠOVÁ, J.: *Multiple-Criteria Fuzzy Evaluation in FuzzME - Transitions Between Different Aggregation Operators*. 32nd International conference on Mathematical Methods in Economics MME 2014, Olomouc (10. 9. - 12. 9. 2014)
- HOLEČEK P., TALAŠOVÁ, J.: *Multiple-Criteria Fuzzy Evaluation in FuzzME - Recent Development*. 20th Conference of the International Federation of Operational Research Societies IFORS 2014, Barcelona (13. 7. - 18. 7. 2014).
- HOLEČEK P., TALAŠOVÁ, J.: *Multiple-Criteria Fuzzy Evaluation in FuzzME - Possible Transitions Between Different Aggregation Types*. International Student Conference on Applied Mathematics and Informatics ISCAMI 2014, Malenovice (27. 3. - 30. 3. 2014).
- STOKLASA, J., TALAŠOVÁ, J., HOLEČEK, P.: *Academic faculty evaluation models: What approach is appropriate for European universities?*, 26th European Conference on Operational Research EURO 2013, Rome, Italy (1.7. – 4.7. 2013).
- HOLEČEK P., KREJČÍ, J., STOKLASA J., TALAŠOVÁ, J.: *Evaluation of R&D outcomes using fuzzified AHP*. International Student Conference on Applied Mathematics and Informatics ISCAMI 2013, Malenovice (2.5. - 5.5.2013).
- STOKLASA, J., TALAŠOVÁ, J., HOLEČEK, P.: *Linguistically oriented model for academic staff performance evaluation*, 25th European Conference on Operational Research EURO 2012, Vilnius, Lithuania (8.7 – 11.7 2012)
- TALAŠOVÁ, J., STOKLASA J., HOLEČEK P.: *Models of academic staff performance evaluation, Efficiency and Responsibility in Education ERIE 2012 Prague* (7.6. – 8.6.2012)
- TALAŠOVÁ, J., STOKLASA J., HOLEČEK P.: *Vícekritériální model hodnocení akademických pracovníků*, 13. seminář Hodnocení kvality vysokých škol (3.5. - 4.5. 2012)
- TALAŠOVÁ J., PAVLAČKA O., BEBČÁKOVÁ I., HOLEČEK P.: *A framework for fuzzy models of multiple-criteria evaluation*. *International conference on fuzzy set theory and applications FSTA 2012*, Liptovský Ján, Slovak Republic (30.1. - 3.2. 2012)
- HOLEČEK P., TALAŠOVÁ, J., STOKLASA J.: *Fuzzy classification systems and their applications*, 29th International Conference on Mathematical Methods in Economics 2011 MME 2011, Janská Dolina, Slovakia (6.9. – 9.9.2011)
- HOLEČEK, P., STOKLASA, J., TALAŠOVÁ, J., ZEMKOVÁ, B.: *Fuzzy classification and its applications in HR management*, International Student Conference on Applied Mathematics and Informatics ISCAMI 2011 (6.5. – 8.5.2011)
- HOLEČEK P., TALAŠOVÁ, J.: *The Software Support for Fuzzy Multiple-Criteria Evaluation*. International Conference Olomoucian Days of Applied Mathematics - ODAM 2011 (26.1. – 28.1. 2011)
- HOLEČEK P., TALAŠOVÁ, J.: *Designing Fuzzy Models of Multiple-Criteria Evaluation in FuzzME Software*, MME 2010, České Budějovice (8.9.-10.9. 2010)
- HOLEČEK P., TALAŠOVÁ, J.: *The Software Support for Multiple-Criteria Evaluation – Various Types of Partial Evaluations Aggregation*, ICAOR 2010, Turku, Finland (25.-27.8.2010)

- Holeček P., Talašová, J.: Software for Multiple Criteria Evaluation Support - The Aggregation of Partial Evaluations by Choquet Integral, Informatics ISCAMI 2010, 20.5.-23.5.2010, Bratislava
- Talašová J, Holeček P.: Multiple-Criteria Fuzzy Evaluation: The FuzzME Software Package. 2009 IFSA Word Congress, 20.7. – 24.7.2009, Lisbon
- Holeček P., Talašová J.: FuzzME: A New Software for Multiple-Criteria Fuzzy Evaluation. ISCAMI 2009, 13. 5. – 15. 5. 2009, Malenovice
- HOLEČEK P., TALAŠOVÁ J.: A New Software for Fuzzy Methods of Multiple Criteria Evaluation, APLIMAT 2009, 3.2. – 4.2.2009, Bratislava

INVITED LECTURES

- HOLEČEK P.: FuzzME – the software for multiple-criteria fuzzy evaluation and fuzzy classification, University of Trento, Italy, 14. 3. 2012.

SEMINARS

- HOLEČEK P.: *Vícekritériální hodnocení ve FuzzME - přechody mezi jednotlivými typy agregace*. Seminář projektu AMathNet Fuzzy modely a jejich aplikace. Olomouc (14. 3. 2014)
- HOLEČEK P.: *FuzzME - software pro vícekritériální hodnocení*. Seminář projektu AMathNet Fuzzy modely a jejich aplikace. Olomouc (10. 5. 2013).
- STOKLASA, J., TALAŠOVÁ, J., HOLEČEK, P.: *Information system for academic faculty performance evaluation (IS HAP): an example of a linguistic approach used in the Czech Republic*, Università Ca' Foscari Venezia, Italy, 18. 4. 2013.
- STOKLASA, J., TALAŠOVÁ, J., HOLEČEK, P.: Approaches to (academic) staff performance evaluation: non fuzzy approaches vs. fuzzy approach. University of Trento, Italy, 14. 3. 2012

APPLIED RESEARCH RESULTS:

- FuzzME software (Holeček, P., Talašová, J., Pavlačka, O., Beččáková, I.). Demo version can be downloaded at <http://www.FuzzME.net>
- Choquet software (Holeček, P., Talašová, J., O., Beččáková, I.). The software makes it possible to calculate the fuzzified Choquet integral and use it for multiple-criteria evaluation. The software is freeware and can be downloaded at <http://www.FuzzME.net>
- Information system for academic staff performance evaluation IS HAP (software: Holeček, P., Doubrava, M., model: Talašová, J., Stoklasa, J.)

AWARDS:

- The first prize in the students contest “O cenu děkana”: First place in the PhD section in the category of the mathematics and computer science (Beččáková, I., Holeček, P.: Fuzzification of Choquet integral and its application in multiple criteria decision making).

TEACHING RESPONSIBILITIES:

Currently, I am teaching the following labs or seminars at the Palacký University in Olomouc:

- Fuzzy Sets and their Application 1
- Fuzzy Sets and their Application 2

- Theory and Methods of Decision Making 2
- Mathematical and Economical Software
- Statistical Software 1
- Statistical Software 2
- Statistical Software 3
- TeX for Beginners

PROJECTS INVOLVEMENT

- Grant agency of the Czech Republic project *Operations research methods for decision support under uncertainty*. [Metody operačního výzkumu pro podporu rozhodování v podmínkách neurčitosti.] (14-02424S) – research team member, 2014 - 2016.
- Individual national project *KREDO – Quality, relevance, efficiency, diversification and openness of higher education in the Czech Republic. Strategy of higher education until 2030*. [Kvalita, relevance, efektivita, diversifikace & otevřenost vysokého školství v ČR. Strategie vysokého školství do roku 2030.] – an expert of a key activity, 2014 - present.
- Several subsequent projects funded by the Czech government aiming on the development of the registry of artistic performances (including a mathematical evaluation model for creative work outcomes of Czech art colleges): *A pilot project of creative work outcomes evaluation to determine the VKM and B3 indicators for art colleges and faculties; C41 Evaluating Creative Work Outcomes Pilot Project*, 2010 – present.
- Several projects funded by the Internal grant agency of Palacký University, Olomouc: *Mathematical models and structures* [Matematické modely a struktury], 2009, 2010, 2011, 2012 and *Mathematical models* [Matematické modely] – research team member.
- Project *MAPLIMAT - Streamlining the Applied Mathematics Studies at Faculty of Science of Palacký University in Olomouc* [MAPLIMAT - Modernizace studia aplikované matematiky na PřF Univerzity Palackého v Olomouci] (CZ.1.07/2.2.00/15.0243) – expert for e-learning deployment and administration, 2010 - 2013.

OTHER SKILLS:

English and German language knowledge, experiences with the web applications and software development (.NET platform and PHP).

Olomouc, 22. 7. 2015
Pavel Holeček