Curriculum Vitae

PERSONAL DATA

Name:	**Mykola Pechenizkiy**	*Office*:	MF7.098. Data Mining Group
Date of Birth:	July 10, 1979		Department of Computer Science (CS)
Place of Birth:	Kharkiv, Ukraine		Eindhoven University of Technology (TU/e)
Nationality:	Ukraine		P.O. Box 513, 5600 MB Eindhoven
Residence:	The Netherlands		The Netherlands
Civil Status:	Married; two daughters	*e-mail*:	m.pechenizkiy@tue.nl
Languages:	Russian, Ukrainian, English, Dutch	*www:*	http://www.win.tue.nl/~mpechen/

EDUCATIONAL QUALIFICATIONS

2012-2013: University Teaching Qualification (BKO), TU Eindhoven, the Netherlands

2002-2005: PhD in Computer Science, Dept. of CS & IS, University of Jyväskylä, Finland
Thesis: "*Feature Extraction for Supervised Learning in Knowledge Discovery Systems*"

2000-2001: MSc in Mobile Computing, Dept. of MIT, University of Jyväskylä, Finland
Thesis: "*PCA-based Feature Extraction for Classification*" (Excellent Thesis Award)

2000-2001: MSc in Computer Science, National University of Radioelectronics, Kharkiv, Ukraine
Thesis: "Online Adaptive Computerized Testing" (Diploma with Distinction)

1996-2000: Bachelor in Computer Science, Department of Software Engineering,
National University of Radioelectronics, Kharkiv, Ukraine (Diploma with Distinction)

PROFESSIONAL CAREER

2016-today Full Professor, Chair Data Mining, Department of Computer Science, TU/e, the Netherlands

2015-2016: Associate Professor in Predictive Analytics**,** Dept. of Computer Science, TU/e

2006-2015: Assistant Professor at Web Engineering group, Dept. of Computer Science, TU/e

2013-today: Adjunct Professor in Data mining for Industrial Applications, Dept. MIT, University of Jyväskylä, Finland

2002-2016: Visiting research stays (> 18 months overall), NYU; UTS, Aalto U, U Porto, TCD, U Ulster, U Alberta

2002-2005: Research assistant, Dept. of Computer Science & Information Systems, University of Jyväskylä, Finland

2001-2002: Software developer/System architect, Niilo Mäki Institute, Finland

SELECTION OF FUNDED RESEARCH PROJECTS

Project leader	RATE-analytics	(2016-2020)	NWO Commit2Data	998k €
	KYC Analytics	(2016-2020)	Rabobank-DSC/e	600k €
	Retail Analytics	(2016-2017)	Philips Lighting	100k €
	CAPA	(2011-2016)	STW Open competition	427k €
	CoDaK	(2011-2013)	NL Agency subsidy	185k €
	HaCDAIS	(2008-2012)	NWO Open competition	208k €
Co-applicant	Productive 4.0	(2017-2020)	EU ECSEL	~970k€
	SODA	(2016-2019)	H2020-ICT-2016-1; Big Data PPP	~700k€
	WiBAF	(2013-2017)	Part of DSC/e Impulse I	~200k€
	CustomerJourney	(2014-2018)	Part of DSC/e Impulse II	~200k€
	Stress@work	(2011-2012)	EIT ICT Labs	~150k€

SUPERVISION OF POSTDOC, PHD, PDENG AND MASTER STUDENTS

Since joining TU/e in 2006 I have been involved in guiding 12 PhD students, 6 postdocs, 3 PDEngs, and 50+ BIS and CSE masters, including 30+ projects in collaboration with industry (Philips Research, ASML, IMEC, Adversitement, Studyportals, Microsoft, Kliknieuws, Multiscope, Sligro, Teezir, C-Content, Coosto).

RESEARCH IN THE PAST 5 YEARS

My main background is in *predictive analytics* and *application-needs-driven data mining,* one of the core areas of *data science.* I study how to develop the next generation of predictive analytics facilitating and improving the performance of various types of information systems used in industry, business, medicine, health and educational domains. The core research has been focused on

> *Handling concept drift in predictive analytics* aiming to make sure that predictive models stay up to date, and that they can react quickly to explicitly not observed changes.

I devote significant efforts into the valorization of research results, including e.g. R&D projects in collaboration with and co-funded by industry.

TEACHING

Since joining TU/e in 2006 I have (co)developed and toughed several BSc-, MSc-, PDEng- and PhD-level courses, including Web Information Retrieval and Data Mining, Web Analytics, Web Information Systems, Foundations of Data Mining, Research Seminar Data Mining, Data Stream Mining. More detailed information can be found from my BKO portfolio available on request.

PUBLICATIONS

Over the past recent years I co-authored over 100 peer-reviewed publications in journals, conferences and workshops. These include several publications in the leading journals and conferences in the field, e.g.: ACM Computing Surveys, IEEE TKDE, SIGKDD Explorations, KAIS, ECMLPKDD, SIAM DM, IEEE ICDM, IJCAI and more specialized journals, e.g. Information Fusion, IEEE Neurocomputing, IEEE TNNLS, IEEE TITB, and IDA among others.
I also co-edited 20 volumes, including books, special issues in journals, conference proceedings, and workshop proceedings.

Citation indices according to Google Scholar (1 October 2017):

	All	Since 2012
Citations	3791	2930
h-index	31	25
i10-index	75	57

Five representative papers:

Maslov A., Pechenizkiy M., Žliobaite I. & Kärkkäinen T. (2016) *Modelling Recurrent Events for Improving Online Change Detection*, In SIAM Int. Conference on Data Mining, SDM16.

Luna J.M., Pechenizkiy M. & Ventura S. (2015) *Mining Exceptional Relationships with Grammar-Guided Genetic Programming*, Knowledge and Information Systems, Springer

Gama J., Žliobaite I., Bifet A., Pechenizkiy M. & Bouchachia A. (2014) A Survey on Concept Drift Adaptation, ACM Computing Surveys 46(4)

Ang H., Gopalkrishnan V., Žliobaite I., Pechenizkiy M. & Hoi S. (2013) *Predictive Handling of Asynchronous Concept Drifts in Distributed Environments*, IEEE Transactions on Knowledge and Data Engineering, 25(10): 2343-2355

Zliobaite I., Pechenizkiy M. (2013) *Predictive User Modeling with Actionable Attributes.* CoRR abs/1312.6558

Preprints of the publications are available at http://www.win.tue.nl/~mpechen/publications/.

SELECTED PROFESSIONAL ACTIVITIES

TU/e	2016-today: Customer Journey research program leader at DSC/e 2017-today: Data Analytics Topic owner in the Philips Lighting Data Science Flagship 2016-today: Member of the Career Development Committee, CDC 2014-today: Member of the Examination committee EC BIS and EC CSE 2012-2013: Member of the Educational committee OC BIS
Professional positions	2015-2019: President of the International Educational Data Mining Society (IEDMS) 2012-2016: Chair of the Steering Committee IEEE CBMS Conference series
Invited Speaker and Tutorials (selection)	HPCS15, ML4Ed@ICML15, Facebook, Menlo Park; Search Labs, Microsoft Research Mountain View; MOOCLets @Barnum, Stanford U.; Learning Analytics Seminar Series, TC U.Columbia; Stern School of Business, NYU; U.Jyväskylä; U.Cordoba; TU Delft, Microsoft Research Redmond; Summer School "Learning with Big Data", Tunisia; Philips Research; U. Porto; Aalto University, Helsinki; Workshop "Sentiment Discovery from Affective Data" (ECMLPKDD'12), PAKDD'11, ECMLPKDD 10, CBMS'10
Editorial boards	Journal of Educational Data Mining (JEDM), associate editor 2012-2017 Journal of Data Mining and Knowledge Discovery (DAMI) since 2014 IEEE Transactions on Learning Technologies (TLT), associate editor since 2016
Guest editor	S.I. "Sparks of the Learning Analytics Future", Journal of Learning Analytics 1(3), 2015 S.I. "Handling Concept Drift in Adaptive Information Systems", Evolving Systems,2013. S.I. "Educational Data Mining", SIGKDD Explorations 13(2), ACM, 2011 S.I. "KDD & computer-based decision support in biomedicine", AIIM, 50(1), 2010. S.I. "Biomedical Data Mining", Data & Knowledge Engineering, 68(12), Elsevier, 2009.
Reviewer for journals	Springer's Machine Learning, Data Mining & Knowledge Discovery, KAIS, UMUAI, Evolving Systems; Elsevier's AIIM, IJAIED, EAAI, Information Sciences, Information Systems, Information Fusion, DKE, KBS, Pattern Recognition Letters; IEEE TKDD, TKDE, TITB, TBE, TPAMI, TLT, TNNLS, IDA, IMIA, ACM TWEB, SADM
General or PC (co-)chair	Benelearn 2017, EDM'15 & EDM'11, IEEE CBMS 2013 & 'CBMS 2012, and, LASI'14, BNAIC'09 (Industry track)
Program commitees	Selection of 2017-2018: AAAI, IJCAI, ECMLPKDD, EDM, LAK, IDA, DSAA