Nikolaos Aletras

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Research Interests

Natural language processing • Data Science • Social media analysis • Machine Learning

Professional Experience

2019	*Lecturer in Natural Language Processing, Computer Science Department, University of Sheffield, UK*
2018-pres	*Lecturer in Data Science, Information School, University of Sheffield, UK*
2015-2018	*Applied Scientist, Amazon Research, UK*
	Member of the Core Machine Learning and Alexa teams.
2015	*Data Scientist (Consult.), SONR News Limited, UK*
2015	*Research associate, University College London, UK*
2014-2015	*Research associate, University of Sheffield, UK*
2011-2013	*Research assistant, University of Sheffield, UK*
2008-2010	Teacher of Informatics, Greece

Education

2011-2014	PhD in Computer Science, University of Sheffield, UK
2010-2011	MSc in Advanced Computer Science, University of Sheffield, UK
2002-2007	BSc in Computer Science, University of Crete, Greece

Key Publications

JOURNAL PAPERS

2017	N. Aletras, T. Baldwin, J. H. Lau and M. Stevenson (2015). *Evaluating Topic Representations for Exploring Document Collections.* Journal of the Association for Information Science and Technology (JASIST).
2016	N.Aletras, D. Tsarapatsanis, D. Preoţiuc-Pietro, V. Lampos (2016). *Predicting Judicial Decisions of the European Court of Human Rights: A Natural Language Processing Perspective.* PeerJ Computer Science.
2016	D. Preoţiuc-Pietro, S. Volkova, V. Lampos, Y. Bachrach, N. Aletras (2015). *Studying User Income through Language, Behaviour and Affect in Social Media.* PLOS ONE.

| 2015 | A. Gonzalez-Agirre, N. Aletras, G. Rigau, M. Stevenson and E. Agirre (2015). Why are these similar? Investigating item similarity types in a large Digital Library. Journal of the Association for Information Science and Technology (JASIST). |

Conference Papers

2018	A. Tsakalidis, N. Aletras, M. Liakata, A. Cristea (2018). *Nowcasting the Stance of Social Media Users in a Sudden Vote: The Case of the Greek Referendum.* In CIKM.
2018	N. Aletras, B. P. Chamberlain (2018). *Predicting Twitter User Socioeconomic Attributes with Network and Language Information.* In ACM HT (short).
2017	I. Soroduc, J. H. Lau, N. Aletras, T. Baldwin (2017). *Multimodal Topic Labelling.* In EACL (short).
2017	N. Aletras, A. Mittal (2017). *Labeling Topics with Images using Neural Networks.* In ECIR (short).
2016	V. Lampos, N. Aletras, J. K. Geyti, B. Zou, I. J. Cox (2016). *Inferring the Socioeconomic Status of Social Media Users based on Behaviour and Language.* In ECIR (short).
2015	D. Preoţiuc-Pietro, V. Lampos and N. Aletras (2015). *An Analysis of the User Occupational Class through Twitter Content.* In ACL.
2014a	N. Aletras, T. Baldwin, J. H. Lau and M. Stevenson (2014). *Representing Topics Labels for Exploring Digital Libraries.* In Digital Libraries 2014 (JCDL).
2014b	N. Aletras and M. Stevenson (2014). *Labelling Topics using Unsupervised Graph-based Methods.* In ACL (short).
2014c	V. Lampos, N. Aletras, D. Preoţiuc-Pietro and T. Cohn (2014). *Predicting and Characterising User Impact on Twitter.* In EACL.
2014d	N. Aletras and M. Stevenson (2014). *Measuring the Similarity between Automatically Generated Topics.* In EACL (short).
2013	N. Aletras and M. Stevenson (2013). *Representing Topics Using Images.* In NAACL-HLT.

Full List: http://nikosaletras.com/publications.html

Teaching & Mentoring

2019	Natural Language Processing
2018	Introduction to Data Science
2018	Researching Social Media, Data Mining and Visualisation
2016, 2017	*Guest Lectures*, University of Warwick, UCL, Kingston Business School
2013, 2014	*Lab demonstrator*, Automata, Logic and Computation
2012	*Lab demostrator*, Advanced Java Programming
2008-2010	*Teacher of Informatics (Licensed Private Tutor)*, Teaching high school students and preparing them for final exams in coding and maths.

Interns at Amazon Research: Nicolas Knudde (University of Ghent, 2017)
Other mentoring: Ionut Soroduc (University of Melbourne, 2016)

Grants

2018	Innovating Next Generation Services through Collaborative Design, ESRC (£13,136, Co-I)
2018	Amazon Alexa Fellowship (one full-funded PhD Studentship), Amazon Alexa Fund ($97,000, Co-PI)
2018	"Journalist-in-the-loop" project, Google DNI Fund ($50,000, Co-I)
2018	AWS Credits Research Award ($20,000, PI)
2013	Pump-Priming Vision & Language Research award (V&L Net: The EPSRC Network on Vision and Language, £2,000)

Honors & Awards

2016	"30 under 30" list of promising Greek Young Professionals, Kathimerini newspaper, Greece
2014	ACL 2014 Travel Award
2012	Google grant covering the registration in the Lisbon Machine Learning School (LxMLS 2012)
2011-2014	Departmental Research Studentship, University of Sheffield
2011	The Inspec Solutions Ltd. Prize for the "Best Overall Performance" in MSc in Advanced Computer Science, University of Sheffield

Selected Press Coverage

2018	*Twitter is "threatening" the pollsters*, Kostas Zafeiropoulos, Efimerida ton Syntakton (+printed) (GR)
2017	*Why a computer could help you get a fair trail*, John Naughton, The Guardian (UK)
2016	*AI predicts outcome of human rights cases*, Jake Wakefield, BBC (UK)
2016	*Artificial intelligence 'judge' developed by UCL computer scientists*, Chris Johnston, The Guardian (+printed) (UK)
2016	*Robot Justice: AI Predicts Outcomes of Human Rights Trials*, Jacob Gershman, The Wall Street Journal (US)
2016	*How Economists View the Rise of Artificial Intelligence*, Jonathan Vanian, Fortune (US)
2015	*Tweets Reveal a Twitter User's Income Bracket*, Rachel Nuwer, Scientific American (+printed) (US)
2015	*What you do on Twitter reveals how much money you make*, Cristina Rivero, The Washington Post (US)
2015	*How you talk on Twitter can tell the world how much money you make*, Derrick Harris, Fortune (US)

Invited Talks

2018	*Predicting Judicial Decisions with Natural Language Processing* Invited talk at the symposium on "Justice System and Healthcare in the age of AI", Insti-

tute of Philosophy, Seoul National University, Seoul

2018   *Predicting Judicial Decisions with Natural Language Processing*
Invited talk at the "Legal Tech Congress" organised by the Flemish Bar Association, Brussels

2018   *Predicting Judicial Decisions with Natural Language Processing*
Invited talk at the "Artificial Intelligence at the service of the Judiciary" organised by the European Commission for the Efficiency of Justice (CEPEJ), the Council of Europe and the Latvian Court Administration, Riga

2018   *Oral evidence to the Technology and the Law Policy Commission*
The Law Society of England and Wales, London

2018   *Labelling Topics Using Neural Networks*
Invited talk at Bloomberg, New York

2018   *Learning Latent Vector Spaces of Text*
Invited talk at Toshiba Research Europe, Cambridge

2018   *Predicting and Analysing Online User Behavior with Data Science*
Invited talk at the Research Seminar Series, Amazon Research, Cambridge

2018   *Predicting Judicial Decisions with AI*
Invited talk at the "Future of the e-Justice in the EU and the new technologies in service of the judiciary" conference organised by the Bulgarian Presidency of the EU Council and the European Commission, Sofia, Bulgaria

2018   *Learning Latent Vector Spaces of Text*
Invited talk at the Machine Learning Seminar Series, Mind Foundry, Oxford

2018   *Predicting Judicial Decisions with AI*
Invited talk at the "Encoding Cultures Encoding Cultures: Living Amongst Intelligent Machines" event, ZKM Karlsruhe, Germany

2018   *Data mining for the Law*
Guest lecture, Computer Science Department, University of Warwick

2018   *Predicting Judicial Decisions of the European Court of Human Rights*
Invited talk at the Department of Theoretical and Applied Linguistics, University of Cambridge

2017   *Evaluating Machine Learning Algorithms*
Invited talk at Roundtable on Uses of Artificial Intelligence in the Criminal Justice System, University of Otago and UEHIRO Centre for Practical Ethics, University of Oxford

2017   *Labelling Topics with Neural Networks*
Invited talk at the University of Cambridge

2017   *Predicting Judicial Decisions of the European Court of Human Rights*
Invited talk at University College London

2017   *Labelling Topics with Neural Networks*
Invited talk at the ReWork Deep Learning Summit, London

2017   *An Introduction to Topic Models*
Guest lecture at the University of Warwick

2017   *Predicting User Demographics in Social Networks*
Guest lecture at University College London

2017   *Predicting Judicial Decisions of the European Court of Human Rights*
Invited talk at University of Leuven

2017	*Predicting User Demographics in Social Networks*
	Invited talk at Imperial College London
2016	*Predicting Judicial Decisions of the European Court of Human Rights*
	Invited talk at King's College London
2016	*Predicting User Demographics in Social Networks: Applications in Marketing*
	Guest lecture at Kingston Business School
2016	*An Introduction to Topic Models*
	Guest lecture at the University of Warwick
2016	*Predicting User Demographics in Social Networks*
	Invited talk at the University of Warwick
2015	*Interpreting Document Collections with Topic Models*
	Invited talk at the University of Melbourne
2015	*Interpreting Document Collections with Topic Models*
	Invited talk at Amazon.com, Inc., Cambridge, UK
2015	*Interpreting Document Collections with Topic Models*
	Invited talk at the NLIP Seminar Series, Computer Laboratory, University of Cambridge

Professional Services

2018	*Reviewer*, NAACL, ICML, EMNLP, NIPS
2017	*Reviewer*, EACL, ACL
2016	*Reviewer*, EMNLP, NAACL, ACL
2015	*Organiser*, CIKM 2015 Workshop on "Topic Models: Post-processing and Applications"
2014	*Student Volunteer*, ACL 2014
2014	*Reviewer*, EMNLP
2013	*Reviewer*, EMNLP

Volunteering Services

2016-2017	*Career Ready programme*, Mentoring college students in Cambridge, UK.

References

Available upon request.