

Miguel Angel Rios Gaona

CONTACT INFORMATION	Academic Medical Center University of Amsterdam Meibergdreef 9, 1105 AZ, Amsterdam.	m.a.riosgaona@amsterdamumc.nl http://mriosb08.github.io
PERSONAL INFORMATION	Birth: September 10, 1982. Nationality: Mexico. Gender: Male. Marital status: Single. Hobbies: Reading, tennis.	
RESEARCH INTERESTS	Bayesian Deep Learning, Natural Language Processing applications for the medical domain, Machine Translation , Quality Estimation, Recognising Textual Entailment, Semantic Textual Similarity and Word Sense Disambiguation.	
EDUCATION	University of Wolverhampton PhD, October 2010 - November 2014. <input type="checkbox"/> Dissertation: Methods for Measuring Semantic Similarity of Texts. <input type="checkbox"/> Supervisors: Lucia Specia, Ruslan Mitkov and Alexander Gelbukh. Centre for Computing Research, National Polytechnic Institute, Mexico MSc (Computer Science), July 2008 - June 2010. <input type="checkbox"/> Dissertation: Word Sense Disambiguation and Recognizing Textual Entailment with Statistical Methods. <input type="checkbox"/> Supervisors: Alexander Gelbukh and Sivaji Bandyopadhyay. Superior School of Computing, National Polytechnic Institute, Mexico BEng (Computer Systems Engineering), August 2004 - June 2008. <input type="checkbox"/> Dissertation: Word Sense Disambiguation Using Synonyms. <input type="checkbox"/> Supervisors: Alexander Gelbukh and Macario Hernandez-Cruz.	
RESEARCH EXPERIENCE	11/2014 - 09/2016	Research Fellow Advisor: Serge Sharoff, University of Leeds.
	11/2016 - 08/2019	Research Associate Advisor: Khalil Sima'an, University of Amsterdam.
	09/2019 - present	Assistant Professor Supervisor: Ameen Abu-Hanna, AMC, University of Amsterdam.

TEACHING	<p><i>Special topics in data science in medicine</i> Lecturer (2020), lecturer (2019). Master Medical Informatics (UvA)</p> <p><i>Natural Language Processing 2</i> Coordinator (2019), main lecturer (2018), lecturer (2017). Master's of AI (UvA) https://uva-slp1.github.io/nlp2/</p> <p><i>Thesis coaching</i> Lecturer (2019). Master's of AI (UvA)</p> <p><i>Natural Language Processing 1</i> Guest lecturer (2018). Master's of AI (UvA)</p> <p><i>Natural Language Models and Interfaces</i> Teaching assistant (2018) Bachelor's of AI (UvA)</p>
SUPERVISION	<p>David Zomerdijk MSc. (2018; UvA) Finding Frequently Asked Questions</p> <p>Erik Stammes BSc. (2018; UvA) Contextual Slot Filling for Task-Oriented Conversational Agents.</p> <p>Alexander Geenen MSc. (2019; UvA) Recognising Textual Entailment based on graph neural networks.</p> <p>Tirza Soute MSc. (2019; UvA) Recognising Textual Entailment based on Bayesian deep learning.</p> <p>Thijs Brouwers MSc. (2019; VU) Text Summarisation based on self-attention neural architectures.</p> <p>Fabio Curi MSc. (2019; VU) Linguistic features for Low-Resource Neural Machine Translation.</p> <p>Marthe Knijff PhD candidate (AMC) Medical Informatics.</p> <p>Giuseppe Albi MSc. (2020; AMC) Enhanced Representations with Knowledge Bases for mortality prediction.</p> <p>Jasper Stevens BSc. (2020; AUC) Hidden Structure as Named Entity Type Predictor.</p> <p>Virginia Ceni Silva Internship (2020; AMC) Medical BERTje: a Pre-trained Dutch Language Model.</p> <p>Ziye Fang MSc. candidate (AMC) Interpretable Neural Prediction Models Using Clinical Notes.</p>
RELEVANT SKILLS	<p>Languages: English, Spanish</p> <p>Skills: Python, C++, Scala, Perl, Java and Linux.</p>
PUBLICATIONS	<p>M. Rios, and A. Abu-Hanna. <i>Deep Kernel Learning for Mortality Prediction in the Face of Temporal Shift</i>. To appear in Artificial Intelligence in Medicine 2021.</p> <p>G. Albi, M. Rios, A. Abu-Hanna, and R. Bellazzi . <i>Pre-trained Text Representations with Knowledge Bases for Mortality Prediction</i>. To appear in Workshop on Knowledge Representation for Health Care, KR4HC 2021.</p> <p>T.T. Luik, M. Rios, A. Abu-Hanna, H.C.P.M. van Weert, and M.C. Schut. <i>The Effectiveness of Phrase Skip-Gram in Primary Care NLP for the Prediction of Lung Cancer</i>. To appear in Artificial Intelligence in Medicine 2021.</p> <p>M. Rios, and A. Abu-Hanna. <i>Mortality Prediction Models with Clinical Notes Using Sparse Attention at the Word and Sentence Levels</i>. Technical Reports AMC 2021.</p> <p>I. Calixto, M. Rios, W. Aziz. <i>Latent Visual Cues for Neural Machine Translation</i>. ACL 2019. Pre-print: aarXiv:1811.0035.</p> <p>M. Rios, W. Aziz, and K. Sima'an. <i>A Generative Model of Lexical Paraphrase Representation</i>. Computational Linguistics in the Netherlands 2019.</p>

- F. Curi, I. Calixto, and M. Rios. *Can we improve low-resource Neural Machine Translation with typological linguistic features?*. Computational Linguistics in the Netherlands 2019.
- M. Rios, W. Aziz, and K. Sima'an. *Deep Generative Model for Joint Alignment and Word Representation*. NAACL-HLT 2018.
- J. Peter, H. Ney, O. Bojar, N. Pham, J. Niehues, A. Waibel, F. Burlot, F. Yvon, M. Pinnis, V. Sics, J. Bastings, M. Rios, W. Aziz, P. Williams, F. Blain, and L. Specia. *The QT21 Combined Machine Translation System for English to Latvian*. WMT'17. Copenhagen, Denmark.
- M. Rios, S. Sharoff. *Large Scale Translation Quality Estimation*. Proceedings of the 1st Deep Machine Translation Workshop, 2015, Charles University in Prague, Faculty of Mathematics and Physics, Institute of Formal and Applied Linguistics, Praha, Czech Republic, ISBN 978-80-904571-7-1.
- M. Rios, S. Sharoff. *Obtaining SMT dictionaries for related languages*. Proceedings of the Eighth Workshop on Building and Using Comparable Corpora (BUCC-2015), ACL.
- M. Rios and L. Specia. *Uow: Multi-task learning gaussian process for semantic textual similarity*. Proceedings of the 8th International Workshop on Semantic Evaluation (SemEval 2014).
- M. Rios, L. Specia, A. Gelbukh and R. Mitkov. *Statistical Relational Learning to Recognise Textual Entailment*. Proceedings of the 15th International Conference on Intelligent Text Processing and Computational Linguistics, CICLing 2014, ISSN 0302-9743, Springer, 2014, pp. 330-339.
- M. Rios, A. Gelbukh. *Recognizing Textual Entailment with Similarity Metrics*. Research in Computing Science, ISSN 1870-4069, Vol. 58, 2012, pp. 337-347.
- M. Rios, A. Gelbukh. *Recognizing Textual Entailment with a Semantic Edit Distance Metric*. 2012 11th Mexican International Conference on Artificial Intelligence (MICAI), IEEE CS Press, 2012, ISBN 978-0-7695-4904-0, DOI 10.1109/MICAI.2012.29, pp. 15-20.
- R. Mitkov, R. Evans, C. Orasan, I. Dornescu, M. Rios. *Coreference Resolution: To What Extent Does It Help NLP Applications?*. Proceedings of Text, Speech and Dialogue (TSD 2012). Lecture Notes in Computer Science Volume 7499, 2012, pp. 16-27.
- M. Rios, W. Aziz, and L. Specia. *UOW: Semantically Informed Text Similarity*. Proceedings of the 6th International Workshop on Semantic Evaluation (SemEval 2012).
- M. Rios, W. Aziz, and L. Specia. *TINE: A Metric to Assess MT Adequacy*. In Sixth Workshop on Statistical Machine Translation (WMT-2011), Edinburgh, UK.
- W. Aziz, M. Rios, and L. Specia. *Shallow Semantic Trees for SMT*. In Sixth Workshop on Statistical Machine Translation (WMT-2011), Edinburgh, UK.
- W. Aziz, M. Rios, and L. Specia. *Improving Chunk-based Semantic Role Labeling with Lexical Features*. In Recent Advances in Natural Language Processing (RANLP-2011), Hissar, Bulgaria.
- M. Rios, A. Gelbukh, and S. Bandyopadhyay. *Recognizing Textual Entailment Using a Machine Learning Approach*. Proceedings of MICAI 2010, 9th Mexican International Conference on Artificial Intelligence.
- M. Rios, A. Gelbukh, and S. Bandyopadhyay. *Recognizing Textual Entailment with Statistical Methods*. Proceedings of MCPR 2010, 2nd Mexican Conference on Pattern Recognition.

Lecture Notes in Computer Science, Springer.

M. Rios, A. Gelbukh, and S. Bandyopadhyay. *Web-based Variant of the Lesk Approach to Word Sense Disambiguation*. Proceedings of MICAI 2009, 8th Mexican International Conference on Artificial Intelligence, ISBN 978-0-7695-3933-1, IEEE CS Press, 2009, pp. 103-107.

M. Rios, S. Godoy Calderon, and A. Gelbukh. *Word Sense Disambiguation with the KORA- Ω Algorithm*. Advances in Intelligent and Information Technologies. Special issue of Journal Research in Computing Science, ISSN 1870-4069, N 38, 2008, pp. 263-270.

REFERENCES

Ameen Abu-Hanna. Professor of Medical Informatics Amsterdam UMC. Email: a.abu-hanna@amsterdamumc.nl

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Lucia Specia. Professor of Natural Language Processing at Imperial College. Email: l.specia@imperial.ac.uk

Serge Sharoff. Associate Professor, Centre for Translation Studies, University of Leeds. Email: s.sharoff@leeds.ac.uk