Denis R Newman-Griffis

Curriculum Vitae

The Ohio State University
2015 Neil Ave
Columbus, OH, USA

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drgriffis.github.io

Natural Language Processing, Biomedical Informatics, Computational Semantics, Information Extraction, Machine Learning

Publications

- 2017 Thanh Thieu, Jonathan Camacho, Pei-Shu Ho, Julia Porcino, Min Ding, Lisa Nelson, Elizabeth Rasch, Chunxiao Zhou, Leighton Chan, Diane Brandt, Denis Newman-Griffis, Ao Yuan, and Albert M Lai. Inductive identification of functional status information and establishing a gold standard corpus: A case study on the Mobility domain. In 2017 IEEE International Conference on Bioinformatics and Biomedicine (BIBM), 2017.
- 2017 Denis Newman-Griffis, Albert M Lai, and Eric Fosler-Lussier. Insights into Analogy Completion from the Biomedical Domain. In Proceedings of the 16th Workshop on Biomedical Natural Language Processing (BioNLP), 2017.
- 2017 **Denis Newman-Griffis** and Eric Fosler-Lussier. Second-Order Word Embeddings from Nearest Neighbor Topological Features. Pre-print: arXiv:1705.08488, 2017.
- 2016 **Denis R Griffis**, Chaitanya Shivade, Eric Fosler-Lussier, and Albert M Lai. A Quantitative and Qualitative Evaluation of Sentence Boundary Detection for the Clinical Domain. In *Proceedings of the AMIA Summit on Clinical Research Informatics* (AMIA-CRI), 2016.

Posters and Presentations

- 2018 Denis Newman-Griffis. Natural language processing approaches to extracting patient functioning from clinical data. Invited talk at Stanford University, Center for Population Health Sciences, March 2018.
- 2018 **Denis Newman-Griffis**, Albert M Lai, and Eric Fosler-Lussier. Jointly embedding biomedical entities and text with distant supervision. Poster presentation, in *Proceedings of the AMIA Informatics Summit*, 2018.
- 2017 Denis Newman-Griffis, Thanh Thieu, Chunxiao Zhou, Diane Brandt, Jonathan Camacho Maldonado, Julia Porcino, Albert M Lai, and Leighton Chan. Characterizing the language of functioning: A corpus analysis illustrating how human function is described in clinical text. Poster presentation, in *Proceedings of the AMIA Summit on Clinical Research Informatics (AMIA-CRI)*, 2017.

Education

2014– **PhD student**, *The Ohio State University, Department of Computer Science and Engineering*, Columbus, OH, USA.

Modeling and extracting information regarding patient function from clinical text. Co-advised by Dr. Eric Fosler-Lussier and Dr. Albert Lai (now of Washington University in St. Louis)

2008–2012 Bachelor of Arts, Carleton College, City, Magna cum laude.

Majors: Computer Science & Russian

- Senior thesis (Computer Science) titled "PIG: Packet Inspection Guru."
- Senior thesis (Russian): translation of Georgiy Demidov's short story, "No Toe Tag," published in the short story collection, "Five Fates from a Wondrous Planet" (2015).

Teaching/Mentoring

- 2018– Advising Brendan Whitaker, OSU Mathematics; Research project on properties of language representations that contribute to downstream tasks.
- Autumn 2017 CSE 3521 Survey of Artificial Intelligence I: Basic Techniques

 Dept. of Computer Science and Engineering, The Ohio State University

Fellowships

2015- **Pre-Doctoral Fellow**, National Institutes of Health, Clinical Center.

Professional Experience

2012–2014 Software Developer, Fulcrum Software Solutions, Dublin, OH, USA.

Designed, developed, and deployed applications in the business and healthcare sectors, using the .NET development stack.

• Acted as client contact for design and troubleshooting on multiple projects.

Service

Departmental Service

2015— **Al Seminar Coordinator**, *The Ohio State University*, Columbus, OH, USA. Coordinated bi-weekly seminar series for student presentations on ongoing Al research at Ohio State.

Reviewer

- 2018 ACL, AMIA Informatics, AMIA Annual Summit
- 2017 ACL, AMIA Annual Summit, EMNLP
- 2016 ACL, AMIA Annual Summit

Other

- 2014– **Volunteer Judge**, *Ohio State Science Day*.

 Judged science fair projects of students grades 5–12.
- 2016–2017 President, Columbus Symphony Chorus, Columbus, OH, USA.

Affiliations

ACL Association for Computational Linguistics ACM Association for Computing Machinery AMIA American Medical Informatics Association ASEE American Society for Engineering Education