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John P. Lalor

Research Interests

Natural Language Processing, Machine Learning, Health Informatics, Recommender Systems, Computer Science Education

Education

- 2015- Ph.D. Computer Science, University of Massachusetts, Amherst, MA.
 - o Advisor: Hong Yu
- 2013-2015 M.S. Computer Science, DePaul University, Chicago, IL.
 - o Graduated with Distinction
- 2007-2011 B.B.A. IT Management, University of Notre Dame, South Bend, IN.
 - o Minor: Irish Language and Literature
 - o Graduated Cum Laude

Professional Experience

- 2015- Research Assistant, BioNLP Group, Amherst, MA.
 - O Supervisor: Hong Yu
- Summer 2017 Applied Scientist Intern, Amazon Alexa, Cambridge, MA.
 - o Supervisors: Imre Kiss and Francois Mairesse
- Summer 2016 Graduate Intern, ESPN Advanced Technology Group, Bristol, CT.
 - Supervisor: Zvi Topol
 - Fall 2015 Teaching Assistant, Introduction to Computer Science, Amherst College, Amherst, MA.
 - o Professor: Crystal Valentine
 - 2013-2015 **Software Developer**, Eze Software Group, Chicago, IL.
 - 2011-2013 Advisory Sr. Associate, KPMG, Philadelphia, PA, Chicago, IL.

Publications

- J. Lalor, H. Wu, L. Chen, K. Mazor, H. Yu. ComprehENotes: Development and Validation of an Instrument to Assess Patient EHR Note Reading Comprehension. J Med Internet Res (forthcoming). doi:10.2196/jmir.9380
- T. Munkhdalai, J. Lalor, H. Yu. Citation Analysis with Neural Attention Models. LOUHI 2016: The Seventh International Workshop on Health Text Mining and Information Analysis, Austin, Texas, USA, November 2016.
- J. Lalor, H. Wu, H. Yu. Building an Evaluation Scale using Item Response Theory. EMNLP 2016: Conference on Empirical Methods in Natural Language Processing, Austin, Texas, USA, November 2016.
- C. Miller, A. Settle, J. Lalor. Learning Object-Oriented Programming in Python: Towards an Inventory of Difficulties and Testing Pitfalls. SIGITE 2015: The Special Interest Group for Information Technology Education Conference, Chicago, Illinois, October 2015
- A. Settle, J. Lalor, T. Steinbach. Evaluating a Linked-Courses Learning Community for Development Majors. SIGITE 2015: The Special Interest Group for Information Technology Education Conference, Chicago, Illinois, October 2015

- A. Settle, J. Lalor, T. Steinbach. A Computer Science Linked-Courses Learning Community. ITiCSE 2015: The 20th Annual Conference on Innovation and Technology in Computer Science Education. Vilnius, Lithuania, July 2015
- A. Settle, J. Lalor, T. Steinbach. Reconsidering the Impact of CS1 on Novice Attitudes. SIGCSE 2015: The ACM Special Interest Group on Computer Science Education. Kansas City, Missouri, March 2015

Posters and Abstracts

- **J. Lalor**, H. Wu, H. Yu. Modeling Difficulty to Understand Deep Learning Performance. *Northern Lights Deep Learning Workshop (NLDL)*, 2018.
- o **J. Lalor**, H. Wu, H. Yu. CIFT: Crowd-Informed Fine-Tuning to Improve Machine Learning Ability. *Human Computation and Crowdsourcing (HCOMP)* Works-in-Progress, 2017.
- J. Lalor, H. Wu, L. Chen, K. Mazor, H. Yu. Generating a Test of Electronic Health Record Narrative Comprehension with Item Response Theory. *American Medical Informatics Association (AMIA)* Annual Symposium Podium Abstract, 2017.

Invited Talks

- Building Better Evaluations using Item Response Theory. University of Notre Dame Natural Language Processing Group, 09/29/2017.
- o Building Evaluation Scales for NLP using Item Response Theory. *UMass CICS Machine Learning and Friends Lunch series*, 12/08/2016.

Awards

Recipient: UMass CICS Travel Grant, January 2018Recipient: DePaul University Graduate Assistantship

Member: DePaul UPE Honor Society Dean's List 4 semesters at Notre Dame

Service

- o Organizer, UMass CICS Machine Learning and Friends Lunch. 2018-Present
- o Mentor, UMass CICS Industry Mentor Program. Spring 2018
- o Reviewer, Journal of Medical Internet Research (JMIR). 2016-Present
- o DePaul University Graduate Ambassador for prospective students
- o DePaul Tutor for undergraduate students as part of my Graduate Assistantship