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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**

- o 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.
- o **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.
- 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 SocietyDean'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