# John Lalor

## Research Interests

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

## Education

Spring 2019 PhD Computer Science, University of Massachusetts Amherst, Amherst, MA.

- (expected) o Advisor: Hong Yu
  - o GPA: 3.8/4.0
  - o Relevant Courses: Machine Learning, Deep Learning, Applied Information Theory, Tools for Explanatory and Advisory Systems
  - 06/2015 Masters of Science Computer Science, DePaul University, Chicago, IL.
    - Graduated with Distinction
    - o GPA: 3.9/4.0
    - Relevant Courses: Web Data Mining, Neural Networks and Machine Learning, Artificial Intelligence, Computational Advertising
  - 05/2011 Bachelor of Business Administration IT Management, University of Notre Dame, South Bend. IN.
    - o Minor: Irish Language and Literature
    - o GPA: 3.6/4.0
    - Graduated Cum Laude

## Employment

09/2015 - Research Assistant, BioNLP Group, Amherst, MA.

- Present o Conduct research in natural language processing and machine learning.
  - o Develop and analyze new methods for evaluating machine learning systems.
  - Utilize the Amazon Mechanical Turk crowdsourcing platform to collect data.
- 06/2016 Intern, ESPN Advanced Technology Group, Bristol, CT.
- 08/2016 Designed and implemented a new summarization API for ESPN content.
  - o Researched distributed representations of ESPN articles for use as features in NLP tasks.
- 09/2015 Teaching Assistant, Introduction to Computer Science, Amherst College, Amherst, MA.
- 12/2015 Professor: Crystal Valentine
  - o Hold weekly office hours, assist students during weekly lab session, and grade weekly lab programming assignments
  - o Prepared and gave two lectures during the semester.
- 11/2013 **Software Developer**, Eze Software Group, Chicago, IL.
- 05/2015 Designed and built a notification system to alert customers when trade orders are completed via email and text message.
  - o Designed and built an administrative dashboard for our case management system that filtered and displayed case information for 1000+ cases across 30+ clients.
  - Designed and built search functionality using Lucene.NET to allow users to search 400,000 legacy cases.

- 07/2011 Advisory Sr. Associate, KPMG, Philadelphia, PA, Chicago, IL.
- 10/2013 Coordinated and performed General IT Control and application control testing for large and mid-size companies across various industries as part of IT Financial Statement Audit Support teams.
  - Developed an automated user access testing application to identify terminated employees across application access lists.

## **Publications**

- T. Munkhdalai, J. Lalor, H. Yu, Citation Analysis with Neural Attention Models, to appear at 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 To appear at 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

#### Skills

- o Programming Languages: Python, R, Java, C#, SQL, Javascript
- o Tools: Git, AngularJS, Flask, Django, Amazon Mechanical Turk, LATEX

### Academic Awards

- Recipient: DePaul University Graduate Assistantship
- o Member: DePaul UPE Honor Society
- o Dean's List 4 semesters at Notre Dame

#### Service

- o DePaul University Graduate Ambassador for prospective students
- o DePaul Tutor for undergraduate students as part of my Graduate Assistantship