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: 3.7/4.0
 - o Relevant Courses: Machine Learning, Applied Information Theory, Deep Learning, Tools for Explanatory and Advisory Systems

06/2015 Masters of Science - Computer Science, DePaul University, Chicago, IL.

- o 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
- o 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.
 - o Utilize crowdsourcing techniques to collect data.

06/2016 - Intern, ESPN Advanced Technology Group, Bristol, CT.

08/2016 • Designed and implemented a new summarization tool for ESPN content.

- o Researched methods for scalable content-based recommendation systems to recommend ESPN articles.
- 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 O 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.
- o 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

- o T. Munkhdalai, J. Lalor, H. Yu, **Citation Analysis with Neural Attention Models**, to appear at *LOUHI 2016: EMNLP 2016 Workshop 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

Programming Languages/Technologies

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

Academic Awards

- Recipient: DePaul University Graduate Assistantship
- 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