Elliot P. Schumacher

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EDUCATION

Johns Hopkins University *August 2017 - Present*
Ph.D. in Computer Science
Center for Language and Speech Processing
Advisor: Dr. Mark Dredze
Research area: Natural Language Processing for Medical Data.

Carnegie Mellon University *August 2015-August 2017*
Master of Science in Language Technologies
Language Technologies Institute
Advisor: Dr. Maxine Eskenazi
Research area: Natural Language Processing for Educational domain.
Selected Courses: Machine Learning, Algorithms for NLP, Machine Translation, Language and Statistics, Deep Learning (all PhD. level courses)
GPA: 3.58/4.00

Ohio State University *May 2014*
Bachelors of Science in Computer & Information Science, and Linguistics
with Honors, Cum Laude
Selected Courses: Computational Linguistics, Speech and Language Processing, Advanced Artificial Intelligence, Computer Vision, Machine Learning
Overall GPA: 3.64/4.00, **Major GPA**: 3.72/4.00

PUBLICATIONS

EMNLP 2016 November 2016

· E. Schumacher, M. Eskenazi, G. Frishkoff, K. Collins-Thompson. Predicting the Relative Difficulty of Single Sentences With and Without Surrounding Context. Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing (EMNLP 2016). *(Link)*.

TECHNICAL REPORTS AND PRESS COVERAGE

A Readability Analysis of Campaign Speeches from the 2016 US Presidential Campaign
March 2016

E. Schumacher, M. Eskenazi. *(Arxiv Link)*.

· **CMU Press Release**: *Most Presidential Candidates Speak at Grade 6 - 8 Level*

· **Selected Press Coverage**

Huffington Post: *Trumps Speeches Are At A Middle-School Reading Level, Study Says.*

Washington Post: *Trumps grammar in speeches just below 6th grade level, study finds.*

Pittsburgh Tribune-Review: *Speeches dip below 6th-grade level, study says.*

RESEARCH EXPERIENCE

Carnegie Mellon University September 2015 - August 2017
Research Assistant *Pittsburgh, PA*

· Worked on the DSCoVAR project, a Department of Education grant to build a Vocabulary Tutoring System.

- Developed a method of ranking the reading difficulty of a sentence for first language learners, by running a crowdsourcing task and modeling the data to find important features (see EMNLP 2016 paper).
- Built a pipeline that finds sentences with selected vocabulary words, and annotates them for difficulty and other information.

WORK EXPERIENCE

State Teachers Retirement System of Ohio January 2013 - August 2015
Student Developer, promoted to Developer *Columbus, Ohio*

- Developed internal applications in Java and C#.
- Designed and implemented a web application for internal forms.

Ohio State University Wexner Medical Center May 2011 - January 2013
Student Intern *Columbus, Ohio*

- Provided technical support within Ohio State's Hospital system.

Ohio State University College of Medicine Sept 2009 - August 2011
Mobile Services Student *Columbus, Ohio*

- Provided technical support for students in the College of Medicine

AWARDS AND ACHIEVEMENTS

Graduate Research Fellowship Recipient

- Selected for a research fellowship, which provides full funding for tuition, stipend, and other fees.
- Scholarship value: USD 75,000 per year, renewable for duration of degree.

Maximus Scholarship Recipient Recipient

- Received a yearly scholarship, which partially covered tuition for 4 years.

TECHNICAL STRENGTHS

Computer Languages	Python, Java, C#. Some experience in C, MATLAB
Toolkits	sklearn, nltk
Databases	MySQL, Oracle, Microsoft SQL