Abram Handler

M.S./Ph.D. student at University of Massachusetts
Email: abram.handler@gmail.com
URL: www.abehandler.com

Areas of interest

Natural language processing • Machine learning • Data science • User-facing text analytics

Education

Present M.S./Ph.D. candidate in Computer Science, University of Massachusetts, fifth semester, GPA 3.8

SLANG Lab: http://slanglab.cs.umass.edu/
Adviser: Brendan O'Connor

2014 M.S. in Computer Science, University of New Orleans, GPA 4.0

Thesis: *An empirical study of semantic similarity in WordNet and Word2Vec*
Adviser: Vassil Roussev

2007 B.A. in Philosophy, Columbia University, GPA 3.874

Awards & grants

2015 **Knight prototype fund grant** to develop the *Rookie* text analytics system
2015 **Excellence in journalism award**, New Orleans press club (for interactive web application)
2014 **Doctoral scholarship (declined)**, University of New Orleans
2007 ***Magna cum laude***, Columbia University
2007-2003 **Dean's list**, Columbia University (five semesters)
2006 **Oxbridge scholars program**, Columbia University - Cambridge University
2003 **John Jay Scholar** recognizing promising incoming freshman, Columbia University

Publications

Rookie: A unique approach for exploring news archives. **Abram Handler** and Brendan O'Connor. *Data Science + Journalism workshop at KDD 2017.*

Identifying civilians killed by police with distantly supervised entity-event extraction. Katherine Keith, **Abram Handler**, Michael Pinkham, Cara Magliozzi, Joshua McDuffie, and Brendan O'Connor. *EMNLP, 2017.*

Bag of What? Simple Noun Phrase Extraction for Text Analysis. **Abram Handler**, Matthew J. Denny, Hanna Wallach, and Brendan O'Connor. *Text as Data, 2016* and *NLP + Computational Social Science workshop at EMNLP, 2016.*

Visualizing textual models with in-text and word-as-pixel highlighting. **Abram Handler**, Su Lin Blodgett and Brendan O'Connor. *Workshop on Human Interpretability in Machine Learning at ICML, 2016*

Identifying Pregnancy Status through STD/HIV Electronic Laboratory Reporting, Eliott Brannon, **Abram Handler** and Joseph Foxhood, *Online Journal of Public Health Informatics*. April 2014.

Skills & software projects

2006-present **Programming**
Longtime, self-taught programmer fluent in Python, NumPy, PyTorch, HTML/CSS, JavaScript, React, Redux, SQL/object relational mappers, Flask, git, Linux and systems administration.

2016 **Phrasemachine**
Developed widely-used `Python` package for finding phrases
`https://github.com/slanglab/phrasemachine`.

2014-2015 **Live election maps**
Leader of technical team which produced the first three live election maps in Louisiana
`http://elections.thelensnola.org`

2014 **Document Cloud (Doc Split)**, Open source contributor: added support for the Tesseract rotation detection plugin
`https://www.documentcloud.org`

Work Experience

2015-present **University of Massachusetts**, Research assistant and teaching assistant, Amherst, MA
Conduct both individual and group research projects as member of SLANG lab. Teaching assistant for graduate course in Natural Language Processing.

2014-2015 **The Lens**, Software developer and data journalist, New Orleans, LA
Founded and lead the news applications team. Produced interactive web stories. Analyzed heterogeneous textual records to programmatically identify corruption.

2013 **C4 Tech and Design**, Software developer, New Orleans, LA
Worked as full-stack web developer using PHP, Git, Drupal, Javascript, CSS and HTML.

2011-2013 **Louisiana Office of Public Health** (Acadiana CARES), Software developer, New Orleans, LA
Successfully refactored a mission-critical system for collecting and monitoring electronic lab reports.

2010 **Jefferson Parish Public Schools**, Digital Opportunity Trust Intern, Gretna, LA
Helped develop a new personnel system in PHP, SQL, CSS, HTML and JavaScript.

2007-2009 **The Bronx Defenders**, Investigator, Bronx, NY
Assisted attorneys at a *pro bono* legal clinic.

2006 **Benenson Strategy Group**, Intern, Manhattan, NY
Taught myself to program by automating routine tasks in Microsoft Excel.

Graduate coursework

Graduate courses (University of Massachusetts): Machine Learning, Natural Language Processing, Deep Learning, Advanced Algorithms, Theory of Computation, Graphical Models, Programming Languages and Statistical Machine Learning.

Last updated: October 23, 2017