JESSE N. DUNIETZ

yavyash@gmail.com • (732) 470-0563 • New Haven, CT • linkedin.com/in/jessedunietz • jessedunietz.com

RESEARCH & ENGINEERING EXPERIENCE

Elemental Cognition: *Researcher* *Feb. 2019–present*
- Leading efforts to define desired behavior for company's natural language understanding technology
- Assisting CEO & team in articulating vision and possible applications for company's technical approach

CMU: *Ph.D. Student (Natural Language Processing)* *June 2011–Jan. 2018*
- Created annotation scheme to represent causal relationships expressed in text, with associated corpus
- Developed techniques for tagging text with the causal language scheme, including a deep learning model

Google: *Software Engineering Intern* *June–Aug. 2011; May–Aug. 2013*
- Developed novel machine learning model for rating named entities' centrality within a document
- Explored and implemented techniques for identifying responses to controversial Internet articles

MIT (Genesis Group): *Undergraduate Researcher* *Sept. 2010–May 2011*
- Incorporated "structure mapping" analogy algorithm into story-processing system for comparing stories

SLAC National Accelerator Laboratory: *DOE "SULI" Intern* *June–Aug. 2010*
- Built a software framework to help high-energy physicists analyze collider data (bit.ly/pydecay)

WRITING, COMMUNICATION, & TEACHING EXPERIENCE

MIT Communication Lab: *Program coordinator & instructional designer* *Apr. 2018–present*
- Train engineering graduate students to coach other STEM students on scientific communication tasks

Scientific American, SciShow, Popular Mechanics, & others: *Freelance science writer* *Aug. 2013–present*
- Write articles and video scripts about computer science and physics (full list: jessedunietz.contently.com)

Securing America's Future Energy (SAFE): *Technology, Energy, and Society Fellow* *Mar.–Nov. 2018*
- With SAFE's support, wrote pieces on autonomous vehicles for Scientific American, SciShow, & others

Scientific American: *AAAS Mass Media Fellow* *June–Aug. 2017*
- Reported and wrote 11 in-depth pieces for Scientific American's news website and print "Advances" section

Public Communication for Researchers (PCR), CMU: *President* *June 2012–Dec. 2016*
- Founded/developed student group that has trained hundreds of CMU students in public communication
- Co-taught workshops for CMU students, CMU faculty, U. of Pittsburgh, Phipps Conservatory, & others

CMU: *Teaching Assistant* *Aug. 2013–May 2016*
- Handled problem sets and exams, office hours, and occasional lectures/recitations for three AI courses

MIT: *Course Instructor* *Nov. 2010–Jan. 2011, Nov. 2008–Jan. 2009*
- Co-developed & co-taught credit-bearing intro C++ course (on MIT OpenCourseWare as "6.096")

EDUCATION

Carnegie Mellon University (CMU) *Ph.D. in Computer Science, January 2018*
Massachusetts Institute of Technology (MIT) *B.S. in Computer Science, June 2011*

SKILLS

Software and technology development:
- Experienced software engineer; at home in Python, C/C++, Java, JavaScript, HTML/CSS, Bash, & others
- Comfortable analyzing data, selecting statistical models, & implementing them in machine learning toolkits

Communication:
- Strong presenter/speaker, honed via running PCR (see above), research presentations, and teaching
- Adept at sharing complex ideas with diverse audiences (from PCR, other workshops, & science writing)

Leadership:
- Strong track record of envisioning organizational strategies, navigating institutional structures, building consensus, guiding discussions to next steps, and mediating conflicts