Natural Language Processing (NLP) Research at Pitt

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Once upon a time…

- Intelligent machines that communicate with us using our language existed only in science fictions.
NLP Applications Today
NLP at Pitt

• Intelligent tutoring (Prof. Litman)
  – Speech
  – Discourse analysis

• Sentiment analysis (Prof. Wiebe)
  – Example: Summary of product reviews

• Machine translation
  – Language modeling
  – Grammar error detection and correction
Undergraduate Opportunities

• Relevant courses
  – Artificial Intelligence (CS1571)
  – Machine Learning (CS1675)
  – Human Language Technologies (CS1673)
  – Grad. NLP (CS2731)

• Research
  – We welcome your participation!
  – Individual project or a part of a larger team
Some Past Undergrad Projects

Josh Albrecht (2008)
Some Past Undergrad Projects

Philip Gianfortoni (CMU, 2009)
More Past and Current Undergraduate Researchers

• Carol Nichols (2005, Now at *Think Through Math*)
  – Word alignment for machine translation
• Wes Goodman (2006, Now at *Google*)
  – Arabic Part of Speech Tagging
• Jarrett Billingsley (2009)
  – Semi-supervised Parsing
• Ellen Gawryla (2011, Now at *Microsoft*)
  – Grammar error correction
• George Price (of *Pomona College*, 2013)
  – Sentence simplification
• Sheridan Zivanovich (current)
Call for Participation

• Not necessary:
  – Background in linguistics or NLP

• Necessary qualities:
  – Curious
  – Persistent
  – Independent
  – Ethical

• Bonus: like (bad) puns, have mathematical maturity
Contact Information

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