Laurel Hart

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laurelehart
konayashi

Education

2013—2014 **Professional Master of Science in Computational Linguistics**,
University of Washington, Seattle, WA.

- Completed 2-year graduate-level program in 1 year
- Focused on Natural Language Processing and language modeling
  - Specific topics include: Machine Translation, Information Retrieval, and Question Answering
- Machine learning algorithms including kNN, Decision Trees, Naïve Bayes, MaxEnt, and SVM

2009—2013 **Bachelor of Arts in Applied Linguistics**, *Portland State University*, Portland, OR.

- Minor in Computer Science
- Honors College, undergraduate thesis: "The Linguistics of Sentiment Analysis"

Experience

2014 **Research Assistant**, *University of Washington - CSE*, Seattle, WA.

- Designed and implemented Java training data pipeline for multi-linguistic relation extraction system, MultiR
- Worked with large corpora:
  - Gigaword English, Spanish, and Chinese corpora: over 9 million documents
  - Freebase: currently over 2 billion facts
- Utilized Stanford's CoreNLP package for tokenization, Named Entity Recognition, parsing, etc.

Winter and Summer 2012 **Intern**, *BCL Technologies*, San Jose, CA.

- Conducted research on Semantic Role Labeling for Modern Standard Arabic
  - Authored demonstration paper published in *Proceedings of COLING 2012* (see Publications)
  - Created annotated linguistic data
- Wrote grant proposals, company awarded $80,000 SBIR toward Multi-Lingual Semantic Author Identification
- Other research areas: text summarization, spoken language identification, automated financial data extraction

2011—2013 **Library Technology Assistant**, *Portland State University*, Portland, OR.

- Lead five-person student IT team March, 2013 — June, 2013
  - Coordinated student workers to ensured lab support coverage
- Provided support for staff and student technologies at the University's Millar Library
  - 90 Windows PCs, 36 Windows laptops, 4 Macs, 3 Ricoh printers, 3 scanners

2010—2011 **Apprentice**, *Braindump, Portland State University*, Portland, OR.

- Performed IT services for the University's Computer Science and Engineering department
  - 137 Windows PCs, 48 Linux PCs, 21 Unix PCs, 8 printers, 3 scanners
- Attended weekly lectures on various topics pertaining to systems administration and general computer systems knowledge

Technical skills & selected projects

Python Implemented various Machine Learning algorithms, HMM-based Part-of-Speech tagger, Word Sense Disambiguation system, and CKY parser

NLTK Created several Context Free Grammars that incorporated features and semantic representations; utilized tokenization, parsing, and Brown, Treebank, and Wordnet corpora tools for Python NLP projects

Current Promptbot: an IRC bot for writers; used upwards of 40 users across 2 networks (Python, ongoing)

Recent Training pipeline for a multilingual relation extraction system (Java); product review sentiment analysis research (Python)

Additional C++, Java, Mallet, Bash, Git, Maven, Stanford CoreNLP

Publications

2012 Hart, Laurel, Hassan Alam and Aman Kumar, "**Revisiting Arabic Semantic Role Labeling using SVM Kernel Methods**" *Proceedings of COLING 2012*. December, 2012: 207—14. http://aclweb.org/anthology//C/C12/C12-3026.pdf