# Jake Vasilakes

Place and Date of Birth: U.S.A. July 23, 1991 Address: 96 Holyrood Road Apt. 34/5, Edinburgh, EH8 8FH UK

**Interests:** Natural Language Understanding esp. semantic parsing, computational semantics (formal and distributional), QA systems, machine translation, natural language generation, ontologies, automatic speech recognition.

### Education

Expected | MSc Speech and Language Processing University of Edinburgh August 2015

#### Exams and marks:

• Advanced Natural Language Processing	77	• Introductory Applied Machine Learning	73
• Speech Processing	78	• Phonology & Phonetics	71
• Statistics and Methodology using R	58	• Automatic Speech Recognition	77
• Natural Language Understanding	80	• Machine Translation	70
• Automated Reasoning	70	• Semantic Web Systems	83
• Topics in Natural Language Processing	79		

**Thesis:** Adding a semantic parser to the Python NLTK library. Advisor: Ewan Klein

#### June 2013 | B.A. Philosophy with Honors Loyola University of Chicago

**GPA**: 3.84/4.00 (Equivalent to UK first)

Minors: Classics, Italian

**Thesis**: "The World of Speech". Advisor: Hanne Jacobs

Honors and Awards: Outstanding Philosophy Senior Award 2013, 2<sup>nd</sup> place Ancient Greek

Translation Contest 2012, Member - Eta Sigma Phi Classical studies honor society

# Work Experience

Aug 2013 - | Computer Technician PRO Computers - Chicago, IL

July 2014 Software and hardware troubleshooting and service across a variety of platforms

Hardware repair (including motherboard-level), solutions to software and OS issues on Windows, OS X, and Linux, data recovery, and user support.

### **Informatics Skills**

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## **Programming Languages**

Python: Very good knowledge. Python 2 & 3, PEP 8 coding standards, unit-testing, numpy.

C/C++: General knowledge (core aspects of the languages).

R: General knowledge (core aspects of the language, applications to machine learning).

Haskell: Some knowledge.

Regular Expressions: Good knowledge (Regex in Python, sed, awk, grep).

Bash shell scripting: Good knowledge.

### Natural Language Processing:

• Language modelling (n-grams, neural networks).

- Syntactic parsing (constituent, dependency, CCG).
- Computational semantics (semantic parsing, formal and distributional semantics).
- Machine learning and statistical modelling.
- Statistical machine translation (alignment models, decoding).
- Automatic speech recognition (HMM framework, GMMs, DNNs), text-to-speech.

Ontologies: RDF, OWL, SPARQL.

Web technologies: HTML, CSS, XML (utilisation with Python), CGI (Python).

Software: NLTK, HTK, WEKA, Festival TTS software, Praat, Wavesurfer, Audacity, MS Office suite.

Operating Systems: Linux/UNIX (including OS X), Windows XP - 8.

# Languages

English (native), Italian (conversational), some knowledge of German and Spanish, also 4 years study of Ancient Greek.