

# Jake Vasilakes

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Place and Date of Birth: U.S.A. July 23, 1991  
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**Interests:** Natural Language Understanding esp. semantic parsing, computational semantics (formal and distributional), QA systems, machine translation, ontologies, automatic speech recognition.

## Education

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

**Thesis:** "Automatic Generation of Wide-scale Semantic Representations in NLTK".

*Advisor:* Ewan Klein

### 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		

**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

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**Aug 2013 - July 2014 | Computer Technician PRO Computers - Chicago, IL**

*Software and hardware troubleshooting and service across a variety of platforms*

Hardware repair (including motherboard-level), solutions to software and OS issues on PC, Mac, and Linux platforms, user support.

Implemented Linux-based data recovery methods that increased both the number of data recovery jobs possible in-shop and the speed at which they could be completed.

# 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

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