# David Vadas

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## Work Experience

**Susquehanna** **Sep 2011 – Present**
Creating statistical models for trading strategies, via machine learning on very large data sets. This involves generating key indicators from market data and significant analysis in a backtesting framework.

**University of Sydney and Capital Markets CRC** **Nov 2010 – Aug 2011**
Building systems for analysing newspaper text as part of an industry partnership with Fairfax Digital. Other duties included lecturing and supervising students.

**Optiver** **Apr 2008 – Nov 2010**
Development work on multiple components of a high-frequency trading system. This includes writing software for monitoring speed and success, interpreting market protocols and an auto-trading tool.

**National Computer Science School, School of I.T.** **Jan 2005 and 2006**
Tutoring Python programming to high school students.

**Academic Staff, School of I.T.** **2003 – 2005**
Tutoring a number of classes, with students from $1^{st}$ and $2^{nd}$ Year, through to honours and masters students.

## Education

**The University of Sydney**

**Doctorate of Philosophy in Science** **Mar 2005 – Apr 2008**
*Noun Phrase Structure for Statistical Parsing*
Greater annotation and analysis of noun phrase structure allows for better performance in parsing and other Natural Language Processing systems.

**Bachelor of Information Technology (Honours)** **Mar 2001 – Nov 2004**
First Class Honours in Computer Science – Grade: 88/100 (WAM: 80%)
Majors in Software Development, Principles of Computer Science, and Networks and Systems.

## Technical Skills

- Proficient with C++ and C, including use of Boost libraries.
- Expert Python programming, including knowledge of Django, numpy and scipy.
- Experienced database user (Microsoft SQL Server, PostgreSQL, and sqlite).
- Considerable practice at using Linux utilities, e.g. awk, to speed prototyping work.
- Able to be productive with many development tools: Visual Studio, vim, git, Subversion, Perforce.
- Expertise in the theory and practice of high frequency trading, machine learning, networking, and tasks from the computational linguistics field such as tagging and parsing.