
Stephen Merity

University of Sydney (2008 – 2011)

Email: smerity@smerity.com

Bachelor of Information Technology (First Class Honours + University Medal)

EXPERIENCE

Consultant (Data Analytics & Machine Learning)

Apr 2012 – Present

Implemented and provided guidance on large-scale data analytics & machine learning projects for start-ups and businesses. Projects include writing real-time analytics dashboards to providing machine learning implementation advice on feature hashing.

Data Analytics and Interaction Mechanics

Dec 2010 – Apr 2012

Freelancer.com, Sydney

TEAM LEAD

Application of advanced data mining methods, statistical testing and machine learning techniques to increase the overall customer satisfaction and revenue on *Freelancer.com*.

IT Special Project

Mar 2010 – July 2010

School of I.T., University of Sydney

Improved the performance of the C&C parser by over 10% by optimizing C++ code and implementing a caching system for the CCG formalism. Experimented with feature hashing to allow machine learners to handle more features with little performance loss.

Google App Engine

Dec 2009 – Mar 2010

Google Sydney

INTERNSHIP

Helped triage and fix multiple bugs in live production code and implemented a feature to enable rapid querying of existing user data. Work was performed in three languages (Java, C++ and Python) with code reviews and unit tests required for each commit.

Wunderkammer

Mar 2009 – Sept 2010

School of Linguistics, University of Sydney

RESEARCH ASSISTANT

Independently implemented and improved Java code for an application to import data in a variety of formats into Wunderkammer - an electronic dictionary for mobile phones.

Summer Research Scholarship Project

Nov 2008 – Mar 2009

School of I.T., University of Sydney

VACATION SCHOLAR

Independently performed feature analysis and implemented Viterbi decoding to classify sentences into an Argumentative Zoning schema using a maximum entropy classifier.

Astrofact

Aug 2008 – Nov 2008

Talented Students Program Research Project, University of Sydney

Worked in a team to implement a prototype system for online querying of an astronomy literature corpus. This involved extracting text from L^AT_EX files and then training a classifier to perform named entity recognition over the corpus.

PUBLICATIONS

Frontier Pruning for Shift-Reduce CCG Parsing 2011

Stephen Merity and James R. Curran

Proceedings of the Australasian Language Technology Association Workshop 2011

Integrated Tagging and Pruning via Shift-Reduce CCG Parsing 2011

Stephen Merity

Honours Thesis, The University of Sydney, Sydney, Australia

Accurate Argumentative Zoning with Maximum Entropy models 2009

Stephen Merity, Tara Murphy and James R. Curran

Proceedings of the 2009 Workshop on Text and Citation Analysis for Scholarly Digital Libraries, ACL-IJCNLP 2009, pages 19–26

AWARDS AND HONOURS

Appen Scholarship for Excellence in Computational Linguistics 2011

Google Australia Prize for Excellence in Computer Science 2011

Sydney University Honours Scholarship 2011

Google Sydney Summer Internship, Google Sydney 2009 – 2010

Best Undergraduate Plan and Elevator Pitch (Genesis Business Plan Competition) 2009

Microsoft Research Asia Scholarship 2008 – 2011

Microsoft Research Asia Prize for Junior Software Development Projects 2008

School of I.T. Summer Research Scholarship, University of Sydney 2008

School of I.T. High Honour Roll, University of Sydney 2008 – 2010

Faculty of Engineering and I.T. Dean's List for Academic Merit, University of Sydney 2008

Best Programmer Award, National Computer Science School 2007

LEADERSHIP EXPERIENCE

National Computer Science School Jan 2009, 2010, 2011, 2012, 2013

TUTOR – Teaching Python programming and Web Design skills to High School students with the aim of them developing a fully functional website by the end of a single week.

Sydney University IT Society (SUITS) Aug 2009 – Sept 2010

PRESIDENT – Responsible for co-ordinating and running SUITS on a day to day basis.

Teaching Assistant: Computer & Network Security (ELEC5616), Technology Venture Creation (ELEC5701)

Tutor: Operating Systems & Machine Principles (COMP2129), Database Systems 1 Advanced (INFO2820), Informatics Advanced (INFO1903), Data Structures (INFO1105)

TECHNICAL SKILLS

- Programming: Proficient in Python and C, familiar with using C++, Java, HTML and shell scripting
- Particular expertise in the Natural Language Processing field including tagging, parsing and the underlying classifiers and algorithms used to carry out these tasks