# Andrew John Tulloch

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# EDUCATION

# 2008-2011 University of Sydney — Bachelor of Science (First Class Honours and University Medal) in Mathematics (Sydney, Australia)

- GPA 93/100 (4.0/4), GMAT 770, GRE 800Q/700V.
- Awarded the University Medal for the **highest** Honours mark in the Faculty of Science.
- Awarded the Science Achievement prize for the **highest** undergraduate GPA over three years in the Faculty of Science (out of over 6,000 students).
- Thesis: "Intensity Models for Credit Risk" (Supervised by Prof. Marek Rutkowski).
- Coursework includes: Artificial Intelligence, Algorithms and Complexity, Algorithmic Game Theory, Stochastic Processes and Advanced Time Series Analysis.

2000-2007 Christ Church Grammar School (Perth, Australia) — 99.95 TER.

#### EXPERIENCE

# 2011 Goldman Sachs — Analyst (Part Time), Algorithmic Trading (Sydney, Australia) (Current)

- Worked as a strategist in the Algorithmic Trading team, focusing on Australian equities.
- Used statistical and machine-learning methods to develop and enhance trading algorithms for the optimal execution of client orders.
- Implemented algorithms in Slang, a proprietary object-oriented language.

# **2010-2011** Goldman Sachs — Summer Analyst, FICC (Sydney, Australia)

- Worked on the Macroeconomic Structuring desk as a strategist.
- Developed statistical and econometric models to devise optimal FX hedging strategies for leading Australian companies.

# **2009-2010** Hope for Children — Overseas Volunteer (Addis Ababa, Ethiopia)

- Volunteered in Ethiopia over summer with the international NGO Hope for Children.
- Developed the infrastructure and administration of a kindergarten for underprivileged children.
- Collected data and created profiles of the children for sponsorship purposes.

#### **2009-2011** St Andrew's College — Mathematics and Science Tutor (Sydney, Australia)

• Tutoring in mathematics, chemistry and physics, in both paid and unpaid capacities.

# TECHNICAL SKILLS

**Programming:** Strong knowledge of Python, SecDB/Slang, MATLAB, R, and LaTeX.

Basic knowledge of C++, Hadoop, XHTML, Javascript, and SQL.

**Interests:** Auction theory, Big Data statistical techniques, machine learning, and typography.

# ACHIEVEMENTS & SCHOLARSHIPS

- 2011 Awarded the University Medal for the **highest** Honours mark in the Faculty of Science.
- Awarded the Science Achievement prize for the **highest** undergraduate GPA over three years in the Faculty of Science.
- Awarded the Faculty of Science Dean's Honour List Prize for achieving the **highest** GPA in third year science.
- 2011 Awarded the K.E. Bullen Scholarship for ranking **first** in Applied Mathematics.
- 2011 Awarded the St Andrew's College Medal for the **highest** undergraduate GPA at St Andrew's College.

- 2010 Awarded the St Andrew's College Bill Caldwell Scholarship for excellence in academic, sporting, cultural, and leadership pursuits.
- 2010 Awarded the St Andrew's College Gold, Silver and Bronze Thistles for academic performance.
- 2009 Awarded the Barker Scholarship for ranking first out of over 500 students in first year mathematics.
- 2009-2011 Placed on the University of Sydney Dean's List of Excellence in Academic Performance.
- 2008-2011 Awarded the University of Sydney Outstanding Achievement and National scholarships.
- Represented Australia at the 39th International Chemistry Olympiad in Moscow. Awarded a silver medal and ranked **42nd** in the world.
- Ranked **2nd** in Western Australia in TEE, placing **1st** in Physics, and achieving a 99.95 TER.
- Awarded the Christ Church Grammar School C.A.S.A award for excellence in academic, sporting, cultural, and leadership pursuits.

### LEADERSHIP

- 2009-2010 Elected Honorary Treasurer of the St Andrew's College Students' Club. Chosen as one of three members of the Student Executive in a key leadership role, managing over 250 undergraduate students.
- 2007 Vice-Captain of Christ Church Grammar School.
- 2007 School Prefect and House Prefect of Christ Church Grammar School.
- 2007 Captain of Debating and State Grand Finalists at Christ Church Grammar School
- 2007 Captain of Mock Trials and State Grand Final winners at Christ Church Grammar School.

# SPORTING & EXTRACURRICULAR ACTIVITIES

- 2010 Published author in *The Sydney Globalist*, an international affairs magazine.
- 2008-2010 Represented St Andrew's College in tennis, basketball and soccer.
- 2009-2010 Coach of St Andrew's College women's hockey team.
- **2008-2010** Represented Sydney University in hockey and AFL at the Australian University Games in Melbourne and Perth.
- 2006-2007 Vice-captain of 1st xI hockey team at Christ Church Grammar School.
- 2006-2007 Player in the 1st XI cricket team at Christ Church Grammar School.
- 2004-2007 Middle-distance (400m and 800m) running champion at Christ Church Grammar School.