
Education

- Sep 2019 – **Columbia University in the City of New York**, United States of America.
Present *PhD in Decision, Risk and Operations*.
Doctoral program in Operations Research, with a full fellowship funded by Columbia Business School.
- Mar 2014 – **The University of Sydney**, Australia.
Nov 2017 *Bachelor of Science (Advanced Mathematics), Honours Class I (Applied Mathematics)*.
Honours Thesis: “A Discrete and Continuous Dictionary”, Supervised by Dr. Robert Marangell.
Bachelor Degree Majors: Mathematics and Computer Science.
Studied at The University of Nottingham (UK) as an exchange student from Sep 2015–Jan 2016.

Previous Experience

- Sep 2020 – **Columbia University in the City of New York**, United States of America.
Present *Teaching Assistant, Columbia Business School*.
Supervised review sessions, wrote assignment problems and marked assessments for the course:
○ Foundations of Optimization (B9118); Fall, 2020.
- Mar 2018 – **Deloitte Australia**, Sydney.
Aug 2019 *Analyst, M&A Analytics (Financial Advisory)*.
○ Wrote functional updates for the iDeal M&A Analytics platform using Dynamic SQL.
○ Constructed a random forest model for a major retail client that predicted shopping malls in Australia with the most potential for revenue uplift, based on Australian census data relating to area demographics and credit card transactional data from a major Australian bank.
○ Constructed a regression model for a debt collection client that predicted the period after which collections may not be profitable in comparison to the purchase amount of the debt ledger.
○ Established a training program to allow non-technical colleagues the opportunity to learn about the basics of programming, databases and machine learning.
- Nov 2018 – **The University of Sydney**, Australia.
Jun 2019 *Research Assistant, School of Computer Science*.
○ Assisted Prof. Irena Koprinska in writing a working paper about using machine learning techniques to automate the process of diagnosing patients with respiratory diseases, such as asthma and COPD.
- Feb 2017 – **The University of Sydney**, Australia.
Nov 2017 *Academic Tutor, School of Mathematics and Statistics*.
Supervised weekly tutorials and marked assessments for the courses:
○ Linear Algebra (MATH1002); Semester 1, 2017.
○ Discrete Mathematics (MATH1004); Semester 2, 2017.
- Nov 2016 – **Deloitte Australia**, Sydney.
Feb 2017 *Summer Intern, Strategic Capabilities (Internal Client Services)*.
○ Developed Tableau visualization templates and analytic frameworks that could be automated in SQL, and wrote unit tests for these analytics using the tSQLt framework.
○ Worked on the back end development of the Deloitte Input Tax Accelerator by programming APIs in Dynamic SQL that retrieved and altered data depending on specific user permissions.
○ Wrote revision quizzes testing basic programming skills and SQL syntax knowledge that eventually contributed to the team’s new starter training program.
○ Contributed to the team’s “Tuesday Tutorials” initiative by giving presentations about the potential applications of data mining and machine learning algorithms in the Audit industry.
- Dec 2011 **CSIRO**, Lindfield.
Research Assistant Intern.
○ Assisted in performing experiments and collecting data for Dr. Jia Du’s research on superconductivity, terahertz radiation and terahertz imaging.
○ Gave a presentation to Du’s research group about the applications of semiconductor and superconductor devices, SQUIDS and RF receivers for wireless communication.

Miscellaneous

Programming Skills.

Java, L^AT_EX, MATLAB, Python, R, SQL, Wolfram Mathematica.

Technology Stack.

Alteryx, Git, SSIS, Tableau, Weka.

Awards & Honors.

Columbia Business School Doctoral Fellowship (2019–Present); Eleanor Sophia Wood Postgraduate Research Traveling Scholarship (2019–2020); Chris Cannon Prize awarded for the best Applied Mathematics Honours Seminar presentation (2018); K.E. Bullen Scholarship No. III awarded to the female student who shows the greatest proficiency in senior units of study prior to enrolling in Applied Mathematics Honours (2017); University of Sydney School of I.T. Summer Research Scholarship (2016–2017); University of Sydney Academic Merit Prize (2016); Dean’s List of Excellence in Academic Performance (2016); Sydney Abroad International Exchange Scholarship (2015–2016); Participant in the Science Faculty Talented Student Program (2014–2015).

Extracurricular Activities.

Girls’ Programming Network Tutor (2016–2019); National Computer Science School Challenge Tutor (2018); University of Sydney Exchange Program Mentor and Representative (2015–2016); Participant in the Sydney Genesis Start-Up Program (2016); Sydney University Mathematics Society (2014–2016); Sydney University Information Technology Society (2014–2016); Associate in Music Australia Diploma for Piano Performance (AMusA AMEB, 2010).