Conor Hassan

+64 22 309 2013 | conordhassan@gmail.com | linkedin.com/in/conorhassan

Education

Queensland University of Technology — Brisbane, Australia
Doctor of Philosophy in Statistics - PhD — *April 2021 – Present*

- Focus on Bayesian Federated Learning.

University of Otago — Dunedin, New Zealand
Bachelor of Science with Honours First Class in Statistics – BSc(Hons) — *February 2020 – November 2020*
Bachelor of Science in Statistics, minor in Mathematics – BSc — *February 2017 – December 2019*

- Dissertation title: Modelling the Effect of Fake News on Elections.
- Average mark of 96%.
- Activities and societies included Class Representative, Private Tutor, Otago Finance and Accounting Society, Otago Mathematics Student Association, Otago Venture Capital and Private Equity Club, Science at Otago Students Association.

National University of Singapore — Singapore
Academic exchange program — *August 2019 – December 2019*

- Average mark of Honours with Highest Distinction.

Experience

Intern Statistical Scientist — November 2020 – February 2021
AgResearch — *Palmerston North, New Zealand*

- Implemented hierarchical Bayesian models for faecal egg count reduction (FACR) using Stan to estimate the drench resistance of sheep on New Zealand farms.
- Used the "brms" package to fit multilevel GLMM models which are more familiar to the Animal Scientists conducting the research nationwide.
- This added interpretability will allow easier communication of inference to farmers and gives the Animal Scientists greater understanding of the structure of data required to answer certain scientific questions.

Teaching Assistant — July 2018 – November 2020
University of Otago — *Dunedin, New Zealand*

- Employed as a tutor for six courses, including STAT110 Statistical Methods, STAT210 Applied Statistics, STAT270 Probability & Inference, STAT312 Modelling High Dimensional Data, STAT372 Stochastic Modelling, INFO420 Statistical Techniques for Data Science.
- Responsibilities included leading weekly tutorial sessions and marking assessments.

Intern Quantitative Trader — December 2019 – February 2020
IMC Financial Markets — *Sydney, Australia*

- Worked within the Hong Kong Delta One team to analyse market data and further develop trading strategies.
- Gained a thorough understanding of trading strategies in a competitive and collaborative practical trading simulations.
- Acquired insights into software development, data science, and the capital markets from a team of industry leaders.
- Learnt a wide variety of software applied to data analysis, including Python, Jupyter Notebooks, and Git.

Intern Risk Advisory Consultant — November 2018 – February 2019
Ernst & Young — *Christchurch, New Zealand*

- Analysed and researched data, assessed various options, and assisted with risk assessments for clients.
- Worked closely with financial consultants and advisors, providing relevant and accurate information, trends, and commentary.
- Attended client meetings, assisted financial consultants, and liaised with clients as required. Ensured compliance with industry best practices, company processes and procedures.

Scholarships and Awards

University of Otago Gopi Jain Memorial Prize 2020
- Awarded to the student who attains the highest level of achievement in Statistics at 400-level.

Prime Minister's Scholarship for Asia 2019
- Awarded by the New Zealand Government to students who showed the potential skills, knowledge, and networks to greatly contribute to engagement between New Zealand and key trading partners.

University of Otago Beverly Bursary in Mathematics & Statistics 2019, 2020
- Awarded to the highest achieving students in the Department of Mathematics & Statistics.

University of Otago Staff Prize in Mathematics & Statistics 2017, 2018
- Awarded for excellent examination results across courses in the Department of Mathematics & Statistics.

University of Otago New Frontiers Sustained Excellence Scholarship 2017
- Awarded upon entry due to excellent examination results in the final two years of high school.

Cerebral Palsy Society Academic Scholarship 2018, 2019, 2020

Manchester Unity Award for Higher Education 2017 – 2020

CFA Student Scholarship 2019

University of Otago NG Stewart Scholarship 2017

Hugh McDougall Rankin Trust Scholarship 2017

Technical Skills

Languages
- Proficient in R, Python, Julia, Java, SQL, SAS, SPSS, Excel, Microsoft Office.

Probabilistic programming
- Experience with Stan, JAGS, and WinBUGS, including a range of packages which provide an interface to Stan.

Statistical software developement
- Strong interest in developing statistical software and in furthering my knowledge of programming and computer science related concepts during the course of my Doctrate studies.

Interests

Improving education for disabled and disadvantaged children
- I was born with right-sided Cerebral Palsy. I get a large amount of satisfaction being involved with organisations who improve education and the quality of life for disadvantaged children who have not been
  given many opportunities.
- Travelled to Shaanxi Province in China to teach English to disadvantaged children in remote villages through
  an outreach program.
- Facilitate after school recreational activities for physically disabled children through the Halberg Foundation.
- Provide voluntary teacher aiding to students with intellectual disabilities at the High School I previously attended.
- Deliver food parcels to struggling families in the community through a local food bank.

Tennis and tennis coaching
- Throughout high school, I was a competitive tennis player, competing at national level tournaments and representing my region in team match play.
- After injury, I transitioned to the role of club coach, where I led training sessions and worked with a range of players with varying abilities.

TRANSCRIPT OF ACADEMIC RECORD

UNIVERSITY of OTAGO
Te Whare Wānanga o Otāgo
NEW ZEALAND

Name	Conor Daniel Hassan
ID Number	9845420
Date of birth	14 November 1998
Entrance qualification	UE (NCEA Level 3) 2016
Qualification(s) completed	Bachelor of Science with Honours First Class in Statistics (completed November 2020) Bachelor of Science - major subject(s): Statistics; minor subject(s): Mathematics (completed February 2020, conferred 16 December 2020)
Scholarships and prizes	Awarded University of Otago N G Stewart Scholarship (2017) Awarded University of Otago New Frontiers Entrance Scholarship at the level of Sustained Excellence (2017) Awarded Staff Prizes in Mathematics and Statistics (2017) Awarded Staff Prizes in Mathematics and Statistics (2018) Awarded Beverly Bursary in Mathematics and Statistics (2019) Awarded Beverly Bursary in Mathematics and Statistics (2020) Awarded Gopi Jain Memorial Prize in Statistics - 400 level (2020) Awarded Council Commendation for Exceptional Performance (STAT435, STAT444) (2020)

2017 Bachelor of Laws (First Year) / Bachelor of Science

Enrolment dates: 24 February 2017 - 11 November 2017 **Full-time**

Period	Paper code	Paper title	Points	%	Grade
S1	CHEM191	The Chemical Basis of Biology and Human Health	18	85	A
S1	HUBS191	Human Body Systems 1	18	84	A-
S1	STAT110	Statistical Methods	18	96	A+
S2	COMP101	Foundations of Information Systems	18	91	A+
S2	COMP160	General Programming	18	90	A+
S2	MATH160	Mathematics 1	18	95	A+
FY	LAWS101	The Legal System	Withdrawn		

2018 Bachelor of Science

Enrolment dates: 23 February 2018 - 10 November 2018 **Full-time**

Period	Paper code	Paper title	Points	%	Grade
S1	MATH170	Mathematics 2	18	90	A+
S1	STAT241	Regression and Modelling 1	18	91	A+
S1	STAT251	Design of Research Studies	18	94	A+
S1	STAT261	Probability and Inference 1	18	91	A+
S2	MATH202	Linear Algebra	18	91	A+
S2	STAT352	Applied Time Series	18	96	A+
S2	STAT362	Probability and Inference 2	18	97	A+

An official transcript is printed on secure paper with an integrated coat of arms watermark and a gold signet.

2019 **Bachelor of Science**

Enrolment dates: **22 February 2019 - 19 June 2019** **Full-time**
5 August 2019 - 7 December 2019

	Period	Paper code	Paper title	Points	%	Grade
SC	S1	BSNS114	Financial Decision Making	18	100	A+
	S1	FINC202	Investment Analysis and Portfolio Management	18	97	A+
	S1	MATH203	Calculus of Several Variables	18	96	A+
SC	S1	STAT372	Stochastic Modelling	18	95	A+
	N8	EXCH000	Exchange Scheme Course - Sciences Semester 2			

2020 **Bachelor of Science with Honours**

Enrolment dates: **21 February 2020 - 7 November 2020** **Full-time**

Period	Paper code	Paper title	Points	%	Grade
S1	STAT435	Data Analysis for Bioinformatics	20	97	A+
S1	STAT444	Topic in Advanced Statistics	20	100	A+
S2	STAT412	Generalised Linear Models	20	93	A+
S2	STAT498	Special Topic: Bayesian Methods	20	96	A+
FY	STAT490	Dissertation	40	95	A+

Credit for study elsewhere

February 2020	Credited with unspecified COMP 200 level 18 pts; unspecified MATH 300 level 18 pts; unspecified STAT 300 level 18 pts (National University of Singapore, 2019).

Grade Point Average

Based on a 9-point scale.

Cumulative	8.9
For 2017	8.5
For 2018	9.0
For 2019	9.0
For 2020	9.0

--- End of Transcript ---

An official transcript is printed on secure paper with an integrated coat of arms watermark and a gold signet.

Certified correct

C. J. Stoddart
Registrar
Date 17 December 2020

The attached last page is a key to grades and abbreviations and should be read in conjunction with this transcript.

An official transcript is printed on secure paper with an integrated coat of arms watermark and a gold signet.

KEY TO GRADES AND ABBREVIATIONS

From 1993 onwards

		GPA
90 – 100	A+	9
85 – 89	A	8
80 – 84	A–	7
75 – 79	B+	6
70 – 74	B	5
65 – 69	B–	4
60 – 64	C+	3
55 – 59	C	2
50 – 54	C–	1
40 – 49	Fail D	0
Below 40	Fail E	0
Failed Terms	Fail	0
Failed Compulsory Assessment	Fail	0
Disqualified	Fail	0
Ungraded Fail	Fail	N/A
Ungraded Pass	Pass	N/A
Aegrotat	Pass	N/A
Completed	Pass	N/A
Comp Pass	Pass	N/A

- First Class Honours, or Distinction
  80 – 100 (1993 onwards)
- Second Class Honours (Division I), or Credit
  73 – 79 (1993 – 2007), 70 – 79 (2008 onwards)
- Second Class Honours (Division II)
  65 – 72 (1993 – 2007), 60 – 69 (2008 onwards)
- Third Class Honours
  50 – 64 (1993 – 2007), 50 – 59 (2008 onwards)

Bachelor of Medicine and Bachelor of Surgery (MB ChB) results since 2002 are based on a criterion referenced system and are not graded but expressed as Distinction, Pass or Fail. The award of overall passes with distinction in the second, third, fifth, and sixth year courses of the programme, the award of passes in individual disciplines in the sixth year with distinguished performance, and the award of the degrees with distinction are determined according to criteria approved by the Faculty of Medicine.

Overall results for the degree of Master of Teaching and Learning (from 2015 on) with (distinction or credit) are determined according to criteria approved by the College of Education.

Absent	=	Did Not Sit
AC	=	Audio Conference
DL	=	Distance Learning
FEO	=	Final Examination Only
ST	=	Special Topic Paper
TCO	=	Terms Carried Over
XM	=	Extramural
SC	=	Special Consideration in Final Examination
RP	=	Repeat Paper
IO	=	Interest Only

Semester information from 1994 onwards

FY	=	Full year
SI	=	Semester One
S2	=	Semester Two
SS	=	Summer School
TY	=	Full Year, Thesis Enrolment
TI	=	First Half of Year, Thesis Enrolment
T2	=	Second Half of Year, Thesis Enrolment
N1 to N8	=	Non Standard Teaching Periods
SC	=	Short Course

Revised Points System

On 1 January 2007 the University of Otago introduced a revised system for the points assigned to each paper, to conform to a national standard for New Zealand universities.

The points for papers taken in or after 2007 are three times those in previous years (e.g. a paper worth 6 points in 2006 is worth 18 points from 2007).

On academic records the points shown for each paper are those for the system in use at the time the paper was passed.

Grade Point Average (GPA) information

The University of Otago uses a 9-point scale for calculating GPA values. An annual GPA is calculated using the grades for all papers (including failed papers) attempted by a student during a given year. It is a weighted average, taking into account the differing point values of papers. A cumulative GPA is calculated for all results to date. For further information see blogs.otago.ac.nz/evision/files/2014/07/Grade-Point-Averages.pdf

Verification of Qualifications

For confirmation of the University of Otago qualifications that have been awarded to former or current students, search the database of graduates at otago.ac.nz

POSTAL ADDRESS
University of Otago | PO Box 56 | Dunedin 9054 | New Zealand