

Emlyn Graham

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Work Experience

Department of Industry, Science, Energy and Resources

Canberra, ACT

GRADUATE

Feb. 2020 - Present

- 12 month development program comprised of two 6 month rotations within the department.
- First rotation in Science Policy, working on supporting the work of the Australian Nuclear Science and Technology Organisation (ANSTO).
- Seconded to Services Australia during the COVID-19 crisis to process the unprecedented volume of JobSeeker and Youth Allowance claims.
- Supported the development and evaluation of data capability in the Australian Public Service as a Steering Committee member and Working Group co-lead for the Graduate Data Network.

Australian National University

Acton, ACT

CASUAL/SESSIONAL ACADEMIC

Feb. 2019 - Nov. 2019

- Demonstrated *Mathematics and Applications 1*, and *Mathematics and Applications 2*.
- Helped students through weekly calculus and linear algebra problem-sets in two workshops per week, of 20-30 students each.
- Set and marked in-class quizzes in these workshops, and marked mid-semester and final exams.

Australian National University

Acton, ACT

STUDENT AMBASSADOR

Jan. 2016 - Nov. 2019

- Worked for the Joint Colleges of Science at the Australian National University (ANU) from Jan. 2016, and ANU Central from Jan. 2018.
- Supported marketing team activities at the ANU, predominantly for Open Day.
- Also represented the ANU as a student for campus tours, National Science Week, school outreach and career fairs.
- Analysed admissions data and identified focus schools for the Joint Colleges of Science.

Widget Brain

Kingston, ACT

TECHNICAL CONSULTANT

Jun. 2018 - Jan. 2019

- Completed technical work at this start-up to support provision of algorithms-as-a-service.
- Led data investigation exercises for new clients.
- Applied cloud-based machine learning models to predict demand in retail clients.
- Helped construct and test mixed-integer optimisation algorithms for workforce planning.

Quantum

Sydney, NSW

SUMMER INTERN

Nov. 2017 - Feb. 2018

- Analysed health and commercial real estate data as part of a consulting contract with the Commonwealth Department of Health.
- Completed analyses in Excel and SQL, developed a GBM price model in R, and visualised and communicated results in PowerPoint.
- Completed additional training in Big Data, including an introduction to Scala and Hadoop.

Australian Academy of Science

Acton, ACT

POLICY INTERN

Jul. 2016 - Nov. 2016

- Co-wrote a long-term policy plan with a fellow ANU science student, focused on the needs of science and mathematics education in Australian schools.
- Liaised with Academy associates and other stakeholders, engaged with current literature, and presented the results to the Academy and the ANU.

Education

Australian National University

Acton, ACT

BACHELOR OF SCIENCE (HONOURS) IN PHYSICS

2019

- Grade: Honours First Class (H1)
- Thesis: *Time dependent coupled channels approaches to nuclear collisions*
- Researched the effects of time-dependent quantum tunnelling on the fusion of heavy ions.
- Developed and implemented a novel time-dependent approach to simulate quantum tunnelling in C++.
- Completed advanced physics coursework.

Australian National University

Acton, ACT

BACHELOR OF SCIENCE / BACHELOR OF MATHEMATICAL SCIENCES

2014 - 2018

- GPA: 6.34/7.0
- Majors: Theoretical Physics and Mathematics
- Minor: Philosophy and Science
- Completed a semester exchange at the Technical University of Denmark, and a summer elective at Yonsei University, Republic of Korea.
- Lived at Ursula Hall for two years (2014/15). Co-managed the hall Film Group, mentored physics students as part of the Academic Program, maintained IT and helped residents with issues, and participated in inter-hall competitions including Inward Bound.

Grants & Scholarships

GRANTS

Mitsui & Co. Australia

Various, Japan

MITSUI EDUCATIONAL FOUNDATION TOUR OF JAPAN

Nov. 2015 - Dec. 2015

- Selected as the representative for the Australian National University on the 2015 Mitsui Tour of Japan.
- Participated in social and cultural activities with seven other representatives on the tour.
- Engaged with key contributors to Australia-Japan relations, including the Australian Ambassador and Consul-General of Kobe, the CEO and employees of Mitsui & Co. Tokyo, and Australian and Japanese students.

Yonsei University

Seoul, Republic of Korea

WINTER ABROAD AT YONSEI

Dec. 2014 - Jan. 2015

- Awarded an ANU Travel Grant to study Psychology at Yonsei University through this summer program.
- Met with Yonsei staff and international students, visited cultural sites including the Demilitarised Zone, and learnt the basics of Korean language.

SCHOLARSHIPS

2019 **Spotless Scholarship**, PBSA (Spotless) Australian National University Partnership

Australia

2019 **Rural & Regional Enterprise Scholarship**, Department of Education and Training

Australia

Volunteering

Kompactus Youth Choir

Canberra, ACT

TREASURER

Mar. 2020 - Present

- Manages the financial position of the choir, including revenue and costs.

Mathematical Sciences Institute, Australian National University

Acton, ACT

MENTOR, BACHELOR OF MATHEMATICAL SCIENCES

Jan. 2019 - Dec. 2019

- Supported new BMASc students in adjusting to university, and specifically university mathematics.

Skills & Certifications

CERTIFICATIONS

Youth Mental Health First Aid Mental Health First Aid Australia

SKILLS

Office Word, PowerPoint, LaTeX

Programming Python, C++, Mathematica

Data Science Excel, SQL, Teradata, R, PowerBI