

Emlyn Graham

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Work Experience

Department of Foreign Affairs and Trade

POLICY AND SAFEGUARDS OFFICER

Barton, ACT
Jan. 2022 - present

Department of Industry, Science, Energy and Resources

POLICY OFFICER

Canberra, ACT
Feb. 2021 - Jan. 2022

Department of Industry, Science, Energy and Resources

GRADUATE

Canberra, ACT
Feb. 2020 - Feb. 2021

Australian National University

CASUAL/SESSIONAL ACADEMIC

Acton, ACT
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.

STUDENT AMBASSADOR

Jan. 2016 - Nov. 2019

- Supported marketing team activities at the ANU, represented the ANU for campus tours and National Science Week, and recruited new students at outreach events.

Widget Brain

TECHNICAL CONSULTANT

Kingston, ACT
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 for retail clients, and built and tested mixed-integer optimisation algorithms for their workforce planning.

Quantium

SUMMER INTERN

Sydney, NSW
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 gradient boosting price model in R, and visualised and communicated results in PowerPoint.

Education

Australian National University

MASTER OF SCIENCE (ADVANCED) IN THEORETICAL PHYSICS

ACT, Australia
2021-present

- Thesis: *Topological photonics*

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++.

BACHELOR OF SCIENCE / BACHELOR OF MATHEMATICAL SCIENCES

2014 - 2018

- Majors: Theoretical Physics and Mathematics
- Minor: Philosophy and Science
- Undertook a semester exchange at the Technical University of Denmark.

Grants & Scholarships

GRANTS

Mitsui & Co. Australia

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 and engaged with contributors to Australia-Japan relations including the Australian Ambassador and Consul-General of Kobe, the CEO and employees of Mitsui & Co., and Australian and Japanese students.

Yonsei University

ANU TRAVEL GRANT

Dec. 2014 - Jan. 2015

- Awarded to study Psychology at Yonsei University through a summer program.

SCHOLARSHIPS

- 2019 **Spotless Scholarship**, PBSA (Spotless) Australian National University Partnership
- 2019 **Rural & Regional Enterprise Scholarship**, Queensland Government Department of Education and Training

Volunteering

Kompactus Youth Choir

TREASURER

Mar. 2020 - present

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

APS Graduate Data Network

ADVISOR

Apr. 2021 - Mar. 2022

APS Graduate Data Network

CO-LEAD, DATA MATURITY REPORT AND MEMBER, STEERING COMMITTEE

Apr. 2020 - Apr. 2021

Mathematical Sciences Institute, Australian National University

MENTOR, BACHELOR OF MATHEMATICAL SCIENCES

Jan. 2019 - Dec. 2019

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

Skills & Certifications

CERTIFICATIONS

PRINCE2 Foundation Axelos

Associate Fellow (AFHEA) Higher Education Academy - Advance HE

SKILLS

Office Word, PowerPoint, Excel, Teams, LaTeX

Programming Python, C++, Mathematica, Matlab

Data Science Excel, SQL, R, Pandas, Matplotlib, ggplot2, PowerBI