

Resume - Aaron Galligan

I am a recent graduate in physics and mathematics. I am passionate about applying my data science and machine learning knowledge to real world problems such as my work with the Menzies Institute for Medical Research on training classification models for classifying skin damage.

EDUCATION

2020 – 2023 **Bachelor of Science - University of Tasmania, Tasmania, Australia.**

Double major in Mathematics and Physics.

GPA of 6.63/7; weighted average percentage of 81.91%.

Relevant knowledge and skill development:

- Statistical knowledge was built through two fundamental statistics units, and further developed and applied through lab components of the four physics units in third year.
- Programming skills were developed through four first year computer science units, and three third year physics units.

2/2024–Now **Google Advanced Data Analytics Certificate (240 hours)**

I am currently completing an advanced certificate specifically focused on data analytics. I have gained good skills in data visualisation and regression models, and further developed my coding skills. In the final modules, I will develop solutions for a real world problem with an associated dataset.

RESEARCH PROJECTS

2024 **Training Machine Learning Model to Identify Sun Damage on Skin Casts**

Currently I am working with the Menzies Institute for Medical Research on a project where the goal is to have trained a model to classify the skin damage from 1 to 6 for a given skin cast. This will subsequently be used to see if there is a correlation between a slowed progression of MS and high skin damage.

2021 **Dean Summer Research Scholarship Project in Quantum Computing (10 weeks)**

I was supervised by Dr Michel Cromer, who works for the Australian Defense Force and is associated with the Australian National University and University of Tasmania. The project explored how quantum states can exponentially speed up the computation time for certain problems by applying the quantum Fourier Transform. I produced a report titled “Efficient Computation Using Quantum States”. In the project I applied concepts from linear algebra, complex analysis, and transform theory.

SCHOLARSHIPS AND AWARDS

2023	Award for Academic Excellence I was placed on the University of Tasmania Roll of Excellence on behalf of the College of Sciences and Engineering for study in the Bachelor of Science.
2021	Dean's Summer Research Scholarship (see above)
2020	College of Sciences and Engineering Catalyst Program Scholarship This scholarship was awarded to students who displayed a high academic achievement, based on ATAR scores, from years 11 and 12. The scholarship is worth \$3000 and provided additional academic opportunities (such as guaranteed enrolment and increased the monetary value of the Dean Summer Research Scholarship.

PROGRAMMING LANGUAGE PROFICIENCY

High:	Python and R.
Moderate:	Java
Low:	C#, HTML, SQL, and C++.

OTHER WORK

2/2024 - Present	Tas Walking Company – Multiday Bush Walking Guiding.
3/2023 – 12/2023	The Hadley's Orient Hotel – Food and Beverage Attendant (2-3 shifts per week).
12/2020 – Present	Blundstone Cricket Arena – Food and Beverage Attendant (2-5 shifts per week).

OTHER

4/2023 – Present	President of the Tasmanian University Slacklining Club. I am responsible for updating risk assessments and insurance, managing inventory through the development of an app, and running highlining day trips and events.
3/2023	Completed First Aid and Wilderness First Aid