

Gerald Freislich

LinkedIn: <https://www.linkedin.com/in/gerald-freislich-8b983926a/>

GitHub: <https://github.com/GeraldFreis>

PROFILE

An innovative and proactive Computer Science Advanced graduate with a robust history of Machine Learning and Software Engineering projects; one won a \$1000 entrepreneurship prize, and another was accepted into the ICML-C 2024 conference.

TOOLS & FRAMEWORKS

Tensorflow & Pytorch	Nodejs & Next.js
Sklearn & Pandas	Agile & T.D.D.
Matplotlib & Seaborn	C++, C & Rust
SQL & Docker	

SKILLS

Leadership	Team player
Fast learner	Proactivity
Adaptability	Analytical
Communication	

EDUCATION & CERTIFICATIONS:

Bachelor of Computer Science Adv. (AI) | GPA: 6.34

The University of Adelaide, 2025

Python Masterclass

Tim Buchalka's Learn Programming Academy, 2021

SQL Advanced Querying Techniques

Maven Analytics, 2025

RELVANT WORK EXPERIENCE

University of Adelaide

Adelaide, South Australia

Research Assistant | Tensorflow, Pytorch-geometric, Pandas, Sklearn, Matplotlib

November 2023 – March 2024

- Co-authored a paper which was accepted into ICML-C 2024.
- Developed novel Machine Learning pipelines to advance Machine Learning and Explainability in challenging network classification problems.

Liberty OneSteel

Whyalla, South Australia

Software Intern | Pandas, Excel

December 2018 – February 2019

- Improved team workflow via automating timetable management and data transformation for in house project management software.
- Excelled in a fast-paced, high-volume environment by managing and prioritising multiple tasks simultaneously.

Hatch

Brisbane, Queensland

Vacation Student | Pandas, System, HTML, JS, CSS

January 2017 – February 2017

- Automated file migration tasks to reduce workflow impediments for data analysts.
- Created a website, using HTML, Javascript and CSS, to display vendor information.

PROJECTS

<https://github.com/GeraldFreis>

ExplanationOptimisation | Tensorflow, Pytorch, Sklearn, Algorithm optimisation, Research and Novel solution construction.

- Developed a novel Neural Network training method to concretely improve model interpretability and trustworthiness.

Colour Generator From Songs | API, End to End programming, ML pipeline design.

- Developed an end-to-end novel product which won \$1000 in an entrepreneurship challenge.
- Automated event-lighting sequences from Spotify songs, using a Diffusion-based Neural Network.

Arithmetic Operations Solver from Images | OOP, Matlab, Algorithm design, Image processing

- Developed a vector-based pixel traversal algorithm for digit classification, applying modular OOP design to compute and solve arithmetic operations.

Block based Compression | C++, Rust, Modular Compression Algorithms, Iterative Test-Driven Development, Agile

- Excelled in an Agile environment to produce a lossless 3D compression product, resulting in an award for fastest lossless compression in the competition.

UNRELATED WORK EXPERIENCE

Front of House Attendant	The Nest Bistro and Restaurant, 2021-2024, 2024-2025
Volunteer Squash Coach	Saint Ignatius Senior College Athelstone, 2022-2024
Disaster Relief Volunteer	BlazeAid February 2025-March 2025
Cattle Farmer	Roscommon March 2025 – May 2025
Landscaper	Adelaide Innovative Landscaping, May 2025–August 2025