

# Euan Mendoza

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## EMPLOYMENT

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- July 2023 - Current*    **UTS Tutor**  
Broadway (UTS), New South Wales
- 41080 Theory of Computer Science - Spring 2023
- March 2023 - Current*    **Private Tutor**  
Sydney, New South Wales
- Develop worksheets
  - Actively engage with student and support their learning.
- March 2022 - Current*    **Soundsplore Tech Consultant**  
Los Angeles, California (virtual)
- Responsible for coordination of design, development and business teams.
  - Business Analysis/Project Management responsibilities.
  - Performed UX research.
  - Flutter/Mobile Software Engineer.
- September 2020 - September 2022*    **Kmart Retail Assistant**  
Hornsby, New South Wales
- Responsible for working in a team to stock the store.
  - Lead new team members in learning to work safely amongst the equipment and maintain presentation standards.

## EXPERIENCE

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- July 2020 - Current*    **Tech Team/Developer**  
Macquarie University, Google Developers Club
- Develop and create workshops and example projects.
  - Educate and share knowledge and experience.
  - Contribute ideas and thoughts.

## PORTFOLIO

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- Matrix Library Template**
- Developed a Template C++ matrix library template for university students to utilise.
- Source Code: <https://gitlab.com/BebopBamf/matrixtemplate>
- Ray Tracer**
- Implemented a high performance multi-threaded physically based renderer in rust based on the ray tracing in one weekend book.
  - Reimplemented parts in glsl compute shaders and vulkan.

## IN ACADEMIA

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- The Complexity of Algebraic Isomorphism Problems (Honours Project)**
- Studying the structural complexity of algebraic isomorphism problems over finite fields
  - Crosses the domain of abstract algebra, linear algebra, representation theory, advanced algorithms and theoretical computer science.
  - [More Information](#)

## TECHNICAL SKILLS

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Languages Haskell - Highly Proficient  
Rust - Highly Proficient  
Typescript/Javascript - Highly Proficient  
Elm - Highly Proficient  
Dart - Highly Proficient  
C++ - Proficient  
F# - Proficient  
Agda/Coq - Proficient  
Elixir - Proficient  
C# - Proficient  
Python - Know Well

Experience, Knowledge and Tools

- Agile and Scrum Workflows.
- Atlassian Suite (Confluence, Jira, Trello).
- System Admin Tools such as RHEL Linux, Cloud Services (AWS), and nginx.
- Databases, specifically PostgreSQL and Microsoft SQL server
- Many backend frameworks, such as servant, ASP.NET, Actix Web, and phoenix.
- Common backend protocols such as REST, GraphQL, WebSockets.
- Front end frameworks such as React and Vue along with state management libraries such as Redux.
- Authentication and identity services such as Auth0 and Okta.
- Research tools such as Latex Typesetting, Bibliography Management Software (Endnote/Zotero), Type Theory and HoTT with related proof checking frameworks (Agda and Coq).

## EDUCATION

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*February 2021 - Current*

**Studying towards Bachelor's degree in Computer Science (Honours) Enterprise Systems Major (Second year onwards)**

Faculty of Engineering and Information Technology, University of Technology Sydney.

- Honours project is to develop a efficient worst-case algorithm for the p-group isomorphism problem.
- Studying pure mathematics (Abstract Algebra, Combinatorial Algorithms and Linear Algebra).
- Also have done extensive software architecture and software design within the degree.

*February 2020 - November 2020*

**Studied Bachelors of Science with a Computing Specialisation (First year)**

Department of Computing, Macquarie University

## OTHER INTERESTS

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- Black Belt in Karate.
- Completed 2 100 plus kilometer hikes.
- Hi-Fi Audio.
- Journalism and Literature.

## REFERENCES

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Available on Request