WILLIAM PRICE

billy.price@unimelb.edu.au

ABOUT ME

I'm Billy, an undergraduate student, studying mathematics, logic and computer science at the University of Melbourne. I live in Brunswick East and enjoy cooking, cycling, poker and Mathematics. In particular I am interested in topos theory, proof theory, and any other topic unifying mathematics with logic and computer science.

EDUCATION

The University of Melbourne *February 2017 - Present*
Bachelor of Science (Major: Pure Mathematics)
Graduation: Dec 2020

The University of Melbourne *February 2017 - Present*
Diploma of Computing
Graduation: Dec 2020

WORK

School of Computing and Information Systems February 2019 - Present
Class Tutor *The University of Melbourne*

Classes Tutored

- Models of Computation (Tutor: Sem 2 2019)
- Foundations of Computing (Tutor: Sem 1 2020)
- Design of Algorithms (Tutor: Sem 1 2019, Sem 1 2020)
- Foundations of Algorithms (Demonstrator: Sem 1 2019)

Vacation Scholarship January 2020 - February 2020
Research Assistant *The University of Melbourne*
· Completed a project in discrete mathematics supervised by Dr. Richard Brak as part of the Vacation Scholarship.

School of Mathematics and Statistics November 2019 - December 2019
Research Assistant & Programmer *The University of Melbourne*
· Wrote code for visualising vulnerable regions in embedded planar graphs, to support Dr. Charl Ras and Nico Andres' active research in the area of network survivability and augmentation.

LearnMate Tutoring November 2016 - November 2019
Mathematics Tutor
· Tutored high-school students in Year 11 and 12 Mathematics (Methods and Specialist).

RESEARCH PROJECTS

- *Formalising an Intuitionistic Type Theory in Lean* `github.com/billy-price/TL`
  - Supervisors: Daniel Murfet, Toby Murray
- *Free Magma : A Library of Universal Catalan Bijections* `github.com/billy-price/FreeMagma`
  - Supervisor: Richard Brak
- *Visualising R-Cuts in Embedded Planar Graphs*
  - Supervisor: Charl Ras
- *Algorithms for Factored ROBDDs* `github.com/billy-price/FR`
  - Supervisors: Harald Søndergaard, Peter Schachte