Bill Deng

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EDUCATION

UNIVERSITY OF NEW SOUTH WALES | Master of Mathematics
Expected September 2020 | Sydney, Australia
- Current WAM: **87/100** (High Distinction) (4.0 GPA Equivalent/A+ Average)

UNIVERSITY OF NEW SOUTH WALES | BSc (Computer Science & Mathematics) (Distinction)
2014-2017 | Sydney, Australia
- 100/100 (**1st place**) in COMP1927 Algorithms & Data Structures

PROJECTS & EXPERIENCE

NATURAL SCIENTIFIC CALCULATOR
2016-2017 | Android · Java · iOS · Swift

I developed Natural Scientific Calculator, Android's highest rated scientific calculator, with over **1.5 million** downloads. I designed and implemented a system for rendering mathematical equations in a natural way. This was my first ever mobile application, and I wrote over 20,000 lines of code. I wrote the Android version in Java, and the iOS version in Swift.

YOINKI | Software Developer
2018 | React Native · TypeScript

I was contracted to develop Yoinki, a platform for social impact. Yoinki is partnered with Oxfam, Beyond Blue, and many other charities. Yoinki allows users to efficiently donate to charities and sign up for volunteering projects. I worked as part of a team in order to build the entire Android and iOS applications, using React Native and TypeScript.

INTERNATIONAL OLYMPIAD IN INFORMATICS TEAM SELECTION SCHOOL
2013 | C · C++

I was one of the top 16 high school students nationwide selected to attend the IOI Team Selection School, a programming bootcamp where students compete for a place on the Australian IOI Team. I competed in algorithmic problem solving programming competitions using C/C++.

INDEPENDENT RESEARCH INTO FLIGHT GEOMETRY
2018 | Mathematica · Unity · C# · LaTeX

I wrote a research paper solving the problem of optimizing turn circles for fighter aircraft. I used Mathematica to solve a system of differential equations that allowed me to devise an efficient flight heuristic. Additionally, I implemented this heuristic in a simulation, using Unity, written in C#.

MONEYTECH | Software Developer
2017-2018 | React · JavaScript · C# .NET

I worked on the MTX web portal for trade finance, replacing ASP .NET Web Forms with Bootstrap equivalents. I also worked on the Digital Engagement Platform, using React to create new pages and features. Additionally, I made API changes to the MTX backend, using C# .NET.

AWARDS

AMAZON AMAZALGO | 3rd Place
2019 | Placed 3rd out of 60 teams at Amazon's programming competition for university students, despite having a team of only 2 members (maximum 3).

PETER FARRELL CUP | Greatest Social Impact Prize
2017 | Won a $2000 prize at the Peter Farrell Cup, a pitchfest for university students with over 90 teams competing.

AUSTRALIAN INVITATIONAL INFORMATICS OLYMPIAD | Bronze Medal
2013 | Won a Bronze medal in the AIIO, a programming competition for elite high school students across Australia.