

# Abhinav Behal

**Phone** +64 22 189 0308  
**Email** abhinav.bahal@hotmail.com  
**LinkedIn** linkedin.com/in/abhinavbehal  
**GitHub** github.com/AbhinavBehal

## Work Experience

### ecoPortal | Development and Implementation Intern

November 2018 – Present

- Implemented additional functionality in an internally used browser extension, which reduced the time taken to complete previously tedious tasks from a few hours to a few minutes.
- Developed a full-stack web application to track statistics of how the platform is being used.

Throughout this internship, I worked directly with members from the various teams at ecoPortal (Implementation, Support, and Development) to better understand their needs and what they desired from the projects being developed. This involved frequent demonstrations and discussions with lead developers, team members, and management.

#### Technology used

JavaScript, Vue, Express, Node.js, MongoDB, Ruby, AngularJS, Git

### Enghouse Interactive | Software Engineering Intern

March 2017 – February 2018

- Improved and added functionality to a tool used internally by developers.
- Developed a chatbot application used in client demonstrations.
- Wrote reusable audio editing components for web and desktop applications.

During this internship I worked closely with one of the team leads on multiple different projects. This involved communicating and working with the UX, R&D and DevOps teams to gather requirements, discuss the feasibility of solutions and integrate final product(s) into existing systems. I also gave a presentation highlighting the newly added features to an internally used tool.

#### Technology used

C#, WPF, JavaScript, TypeScript, Angular 2 / 4, HTML, CSS, WiX, Git

## Projects

### Tātai | Māori mathematics learning aid

Developed an application in a group of two that tests users on their ability to correctly pronounce numbers in Māori. The application also allows users to develop their Māori language skills by solving mathematical problems of adjustable difficulty.

#### Technology Used

Java, JavaFX, CSS, HTK, FFmpeg, Bash

## **genius.fm | Web application for song lyrics**

Developed a web application that uses the last.fm and genius.com APIs to get lyrics for your currently playing song, as well as information about what those lyrics mean.

### **Technology Used**

JavaScript, React

## **TaskScheduler | Application to solve an NP-hard problem**

Developed an application in a group of four that optimally schedules tasks on processors, given the number of processors and a graph representing the dependencies between the tasks. Since this problem is NP-hard, various techniques were researched and used to optimise the final application.

### **Technology Used**

Java, JavaFX

## **Advent of Code | Solutions to programming puzzles**

Developed solutions for all of the puzzles in the annual Advent of Code programming competition. Algorithms for each problem were carefully designed with efficiency in mind, resulting in the majority of solutions running in a few milliseconds. Each solution was developed using modern C++ techniques and idioms.

### **Technology Used**

C++

## **Education**

### **The University of Auckland | Bachelor of Software Engineering (Honours)**

2016 – Present (Final Year)

GPA – 8.5 / 9 | A/A+ average

#### **Completed Courses**

- Introduction to Data Structures and Algorithms | A
- Object-Oriented Software Construction | A+
- Fundamentals of Database Systems | A+
- Computer Networks | A+

#### **Courses in Progress (Semester 1 2019)**

- Advanced Software Engineering Development Methods
- High-Performance Computing
- Software Requirements Engineering

#### **Awards**

- Dean's Honours List | 2016, 2017 & 2018 – Awarded to the top 5% of engineering students in their cohort
- First in Course Award – Object-Oriented Software Construction
- First in Course Award – Fundamentals of Database Systems

## **References**

**Jonathan Miller** - Team Lead, Development | Enghouse Interactive

+64 21 808 755

jonathan.miller@enghouse.com

**Deborah Maud** - R&D Director, Communications Center | Enghouse Interactive

+64 27 541 9586

deborah.maud@enghouse.com