

# Ibrahim Syed Shah

[ibrahim.syedshah@gmail.com](mailto:ibrahim.syedshah@gmail.com) | <https://ibrahimsyedshah.github.io/Advanced-e-portfolio/> | 0420211583

## Education

### **Bachelor of Software Engineering (Honours)**

Jan 2022 – Current

University of Sydney

- Currently in my penultimate (third) year. Maintained a Distinction average in both my first and second year.
- Successfully completed a range of group projects and played multiple technical and non-technical roles, including team leader.
- Demonstrated empathy, team dynamics, conflict resolution, communication and leadership skills within group projects.

### **High School Certificate (HSC)**

2021

Al Faisal College

- Graduated in 2021 as an All-Rounder with an ATAR of 99.70.

## Projects

### **NSW Bustling Metric Analysis**

- Utilised PostGIS and GeoPandas to process, analyse and visualise geodetic data.
- Cleaned and pre-processed data from multiple datasets before performing analysis using SQL and Python's Pandas library, visualising results, deriving insights and documenting findings in both a Jupyter notebook and a report.

### **Classifying Images of Handwritten Digits**

- Trained, tested and analysed the performance of multiple machine learning models on images from the MNIST database, and presented findings in a formal report.
- Experimented with and fine-tuned separate models to improve accuracy and reliability.

### **Maze Navigating Robot**

- Led a team in designing an algorithm in C++ for a robot to navigate through a maze, both in a computer simulation and using Arduino hardware.
- Produced a robot that was able to successfully complete the maze in a competitive time.

### **Statistical Analysis on Enterococci Bacteria in Sydney Beaches**

- Performed the statistical analysis of a given dataset using R and presented findings in a formal report.

### **Space Invaders Mock Game**

- Implemented various GoF design patterns (such as Builder, Decorator and State) to build a game in Java.

## Experience

### **High School Tutor**

Feb 2022 – Current

Ninety Plus, Profectus Tutoring, Self-Employed

- Provided tutoring both privately and in a company to students from a range of ages and in a range of subjects, including Mathematics, Science and Physics.
- Constructed a term plan tailored to the student(s) and observed a significant improvement in their marks.

### **Frontend Developer Internship**

Jun 2022 – Dec 2022

Frontend Simplified

- Utilised Git version control and the GitHub interface to work and thrive in a virtual and collaborative team environment.
- Transformed a completely static HTML, CSS, JavaScript and React single page application into an interactive user interface using animations, transitions and carousels.

## Honours & Awards

### **NSW Premier's Award for All-Round Excellence**

Jan 2022

NSW Government

- Achieved the highest band (Band 6) in all HSC units, including Mathematics Extension 1, Mathematics Extension 2, English Advanced, Physics and Chemistry.

### **Dalyell Scholars Program**

Jan 2022

The University of Sydney

- The Dalyell Stream rewards high-achieving students with an ATAR of 98+.
- Provides access to a range of enrichment opportunities that extend academic abilities and develop leadership capabilities.

## Technical Skills

**Languages:** Python | Java | PostgreSQL | HTML5 | CSS3 | JavaScript ES6+ | Typescript | C | R

**Frameworks/Libraries:** Jupyter | Pandas | Sklearn | React (+ hooks) | Next.js | Material-UI

**Technology:** Git | NPM | React dev tools | Junit | Jenkins | Firebase v9 | pgAdmin

## Referees

*\*Available upon request.*