

# JAPNEET SACHDEV

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## Profile

Motivated Engineer ready to make an impact in the organisation with my technical and new innovative ideas. Would bring unique solutions to competitive problems with strategic and creative thinking along with passion for technology and hunger for success. Determined and energetic, having the ability to communicate at all levels, thereby ensuring good teamwork and a positive working environment.

## Education & Qualifications

Macquarie University, Sydney Australia

2019 - 2024

### Bachelor of Software Engineering/Computer Science (Honours)

- Technical Skills Gained
  - Java (Advance)
  - SQL (Advance) Ran queries in order append and traverse through large databases
  - C++ (Intermediate)
  - Unity (Advance)
  - Figma (Advance)
  - Alteryx (Intermediate)
  - UiPath (Intermediate)
  - Tableau (Intermediate)
  - Javascript, React, ReactNative (Intermediate)
  - Python, Linux (Advance)
- Artificial Intelligence (University of Wuhan, China) **Projects**

### Computer vision affecting human-human interactions

Jan 2023 to Nov 2023

Comparison between online and offline classrooms through Machine learning and autonomous online recordings, cameras.

- Making an ethics application to have real data sets.
- Analysing facial patterns through online recordings and making observation sets.
- Noting down observations and results of the same and making sure the comparison makes a difference. **Findings:** Enhancing communication through facial recognition but raises privacy and ethical concerns.

**Solution:** Involves robust data protection policies and promoting responsible AI usage.

### Renewable Resource Export

February 2022

Organising a project to use renewable

sources to capture the initial energy equivalent to current exports and then design systems that will capture, transform, transport, control, as well as track the energy.

- The capture of natural resources can meet the 55,000 PJ of energy that needs to be exported.
- The transform of the captured energy must be feasible and can meet the needs of the client.
- Transporting the renewable resource in feasible means.
- Controlling the volume of energy needed to be exported and controlling the amounts of energy that is generated from that renewable resource with its transport.

## Ball Collection Robot

November 2021

Building an automated robot for collection of balls in a specified area.

- Connection of the State machine which is the logical system behind the robots operations.
- Responsible for Control box communication and movement of the robot along with state machine.
- Communications done to move the robot, making buttons like start stop slow fast.

**Solution:** Fine-tuning autonomous navigation, optimizing ball recognition, and enhancing user-friendly controls for widespread adoption.

## Mobile Application Development

June 2021

In this project, mobile application “MemWall” was developed to store, create and edit memories of oneself.

- Technical skills of JavaScript was involved with addition to working in a iOS and android set up.
- Creating wireframes and mock-up designs of the software.
- Created using Expo Library for application.

**Findings:** Include cross-platform solutions, app security, and user experience enhancements.

**Solution:** Involve agile development methodologies, robust security measures, and usability testing to create successful mobile apps.

## Autonomous Transit System

November 2020

In this project, built a monorail where our software team was responsible for:

- Connection of the motor to the State machine which is the logical system.
- Having LED light check in the system to configure start, pause and stop.
- Addition to the state machine, we also worked to built control box and Bluetooth which communicate the monorail to start/stop, open/close door and regulate the speed as well.

**Solution:** Include refining navigation algorithms, addressing regulatory challenges, and improving safety mechanisms for widespread implementation.

## Rube Goldberg Machine

September 2019

Rube Goldberg machine (RGM) that can activate an “Arduino Circuit” that turn on a sequence of LEDs.

- Build a LED sequence which when turned on ensures - Green LED turns on After 2 seconds Orange LED turns on.
- Having time constraints to run the machine, should be done within 10 minutes, having 8 steps of maximum 3 seconds.

**Solution:** Encompass creative engineering, education, and promoting interdisciplinary collaboration to explore the full potential of these machines.

## Work Experience

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### Software Tester Trainee | World Sports Action | Australia

February 2024 to June 2024

One of

the Tester in helping to make the Web page and Application run successfully and identify bugs.

- Interact and work with development and business team, responsible for developing the product.
- Actively involved in testing all aspects of our web and mobile applications, such as functional testing, system testing, user acceptance testing, and regression testing
- Implementation of SQL coding language for database management.

### Widening Participation Unit Student Ambassador |

July 2023 to November 2023

#### Macquarie University | Australia

Representing Macquarie by being a student ambassador:

- Going to different schools and promoting career pathways to students and helping them understand different opportunity in the future. Enhancing awareness of educational disadvantage and other challenges faced by students from equity backgrounds.
- Helping lead the Equity Ambassadors in conducting classes and liaising with teacher in charge and making sure everything is going smoothly. Engaging stakeholders and partners to grow the community of equity in education practice
- Getting feedback from the equity ambassadors and making sure they are heard and improving the widening participation unit. Encouraging collaboration across the learning community to dynamically reshape discourse, practice and policy around equity in education.
- Responding to customers' questions and queries in a courteous way and engaging with co-workers to gain feedback on customer experience to increase the workflow of the store.

### Junior Software developer | Codemasters | Australia August 2022

June 2022 to

One of the developers in helping making the Point of Sale system for clients.

- Ensuring the Software is developed on time.
- Creating a customised Point of Sale system for the customer.
- De bugging and maintaining the customised POS system.
- Maintaining communication between the team and my manager.
- Implementation of Python coding language using libraries like pyserial, pyusb and pywinusb.

### Sales/ IT Consultant – Menswear | Ferrari Formalwear| Australia

August 2023 to November 2023

Sales representative and Leader of the menswear team in Myers:

- Making sure all POS sales are done correctly and collecting all the reports.
- Leading the team by completing weekly goals and ensuring the team is engaging and making sure Myer targets are completed.

### Residential Advisor | Morling Residential College | Australia

Feb 2021 to November 2023

Residential Advisors are trained first health and mental health aiders who work and support in:

- Ensuring that the residents cards are coded properly using Dialock.
- Debugging the WiFi set up of Morling College through Speedtest and reporting back to the management for further action.

## **Volunteer work**

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Student Association President/Team Member   Morling Residential College	Jan 2020 to Dec 2021
Macquarie Indian Society Event Co-ordinator   Macquarie University	Jan 2022 to Dec 2022
Macquarie Sikh Society Event Co-ordinator   Macquarie University	Jan 2021 to Dec 2021

## **References: Upon Request**