Nicole Leow Ke Xin

0458686003
nicole.leow@hotmail.com
https://www.linkedin.com/in/nicole-leow-40b117214/

Summary

As a highly motivated and accomplished student pursuing a double degree in Mechatronics Engineering and Computer Science at the University of New South Wales, I am eager to apply my skills and passion for technology to a professional engineering role. With active involvement in the UNSW Mechatronics Society and the UNSW VIP Connected Health Team, I have gained valuable experience in project management, teamwork, and software engineering. My strong communication skills, attention to detail, and adaptability allow me to excel in different environments and work effectively with diverse teams. As an aspiring engineer, I am committed to learning and upskilling myself to meet the challenges of the rapidly evolving technological landscape. I am excited to contribute to a dynamic and innovative organization and build meaningful connections in the industry.

Education

UNSW Sydney (2021 - present)

- Double degree in Bachelor of Mechatronics Engineering (Honours) and Bachelor of Science (Computer Science)
- HD (over 85) weighted average mark
- Awarded the International Scientia Coursework Scholarship for full tuition fee remission

Sunway College (2020 - 2021)

- 4A* (High Distinction) in the Cambridge A Levels

Technical Skills

- Fusion 360
- SolidWorks
- Mechanical Design for 3D printing
- Laser Cutting Operations
- C Language
- JavaScript Language
- C ++ Language
- Python Language
- React
- HTML & CSS
- Julia Language

Experiences

UNSW Mechatronics Society Executive Member (2023 – Present)

- Ensured the smooth operation of the society by overseeing events, workshops, and projects run by the society.
- Worked collaboratively with other executive members to develop and execute strategies to promote the society and attract new members.
- Coordinated with external stakeholders and professionals to establish partnerships and secure funding.

Connected Health Software Engineer (2023 – Present)

- Responsible in developing machine learning modules for statistical analysis to improve the accuracy of image-guided surgical tool in the removal of cancerous oral lesions.
- Implement software using programming languages such as Julia and MATLAB.

UNSW Mechatronics Society Projects Subcommittee (2022)

- Responsible in planning, organising, and running workshops and projects.
- 2022 UNSW SumoBots Competition – Run and assisted in various workshops to guide competitors through designing and building a sumo robot. Led workshops in CAD, 3d Printing and coding using software like SolidWorks and Cura and Arduino IDE.

UNSW CSESoc Annual Hackathon (2022)

- Coded a website called Beagle to find credible news, utilizing tf-idf calculations and passive aggressive classifier for machine learning to filter credible news.
- Collaborated with a team of software developers to plan and execute the development of the website, using technologies like HTML, CSS, React and Python.

Relevant Projects

Treats - Backend Javascript Server (2022)

- Built the backend server of a communication platform that allows students to share, communicate, and collaborate virtually
- Demonstrate effective use of software development tools to build full-stack end-user applications.
- Demonstrated effective use of static testing, dynamic testing, and user testing to validate and verify software systems.
- Demonstrated an understanding of version control, continuous integration, and deployment tooling to sustainably integrate code from multiple parties.

Sumo Robot (2022)

- Used SolidWorks to design chassis and assembled the 3D printed chassis along other components like motors, motor drivers, sensors etc.
- Wrote C++ code for the autonomous Arduino-based robot to be able to locate opponents and push them out of the ring.

Soccer Droid (2022)

- Used SolidWorks to design chassis and assembled the 3D printed chassis along other components like motors, motor drivers, PixyCam, 3 omniwheels etc.
- Wrote C++ code for the autonomous Arduino-based robot to be able to navigate and play soccer.