

Himavaan Chandra

Education

Bachelor of Engineering (Major in mechatronics) Diploma in Professional Engineering Practice
University of Technology Sydney (UTS)

Feb 2017- Nov 2021
(Expected)

- 5.6 GPA
- 75.85 WAM

Academic Achievements

Thales Senior Cooperative Scholarship 2020

Technical Skills

Systems: Windows, Ubuntu, Kali Linux, ROS

Software: SolidWorks, Jira, Confluence, Trello, GitHub, Microsoft Azure, Visual Studio, Arduino, Autodesk (3ds Max, Maya), Adobe (Illustrator, Photoshop, Premiere, After Effects), SSMS, Virtual Battlespace Simulator 3, VBS Blue IG, Microsoft Office software, Betaflight, INAV, ArduPilot and BLHeli configurator.

Languages: C, C++, Python, MATLAB, SQL, Angular.

Version Control: Git

Hardware: Drones and other radio controlled aircraft and vehicles (Flight controllers, speed controllers, receivers, control link transmitters, video transmitters, cameras, motors, servos, video goggles and antennas), 3d printers, Raspberry Pi 4, HTC VIVE and VIVE Pro, Arduino boards and sensors.

Employment

Intern – Engineer

Thales Australia

Jul 2020-Dec 2020

- Integrated software and hardware systems into a training system.
- Wrote C++ code to help integrate the different systems.
- Integrated multiplayer virtual reality systems into the training system.
- Demonstrated prototype systems to potential clients.

Intern – Software Engineer

MedicalDirector

Aug 2018-Jan 2019

- Helped create software automation scripts.
- Helped write unit tests in C# to test code.
- Created a web application in Angular.
- Migrated medical practice data to new software.
- Debugged data migration errors using SQL.

Pharmacy Assistant

Chemsave Wentworthville Plaza

Jan 2017-Oct 2018

- Organised prescriptions in correct numerical and categorical order.
- Listened to customer requests concerning their prescriptions and noted the requests down for the pharmacist.

- Listened to customers to help choose the best product for their symptoms.
- Prioritised and managed time allocated on tasks to reduce the customer wait time.

Projects

Videos of projects that I have completed can be found on my YouTube channel Himatronics. Here is a playlist of the projects:

https://www.youtube.com/watch?v=gbcklIF_aLk&list=PLFmuo2oK45nfhSqZsGDM_cBSUrgNj3TuZ

Portfolio: <https://himavaanchandra.github.io/>

Core Skills

Problem solving skills- I developed good universal problem-solving skills when working for Thales Australia since I was working with many different software and hardware systems and integrating them together. Additionally, I completed a lot of trouble shooting in ROS and Python when leading my mechatronics 2 group project. Good problem-solving skills have also been demonstrated through the marks achieved in Dynamics and Control and Mechatronics 1.

Communication skills- I strengthened my communication skills when teaching ROS to my mechatronics group for our laser tag robots project (A video of the project is in the playlist of project videos above). I also demonstrated good communication skills when working at Thales Australia though the pandemic since I was able to continue working with a lack of contact hours with my supervisor due to restrictions.

Interpersonal skills- Developed good interpersonal skills working as a pharmacy assistant and assisting many customers and when demonstrating prototype systems to potential clients at Thales Australia.

Extra- Curricular Activities

UTS Motorsports Autonomous Team - On this team I am programming a vehicle to race around a track autonomously using computer vision. A neural network is used to detect cones lining the track then a racing line is developed using this data.

Thales Tech Challenge 2019 – I competed in the Thales Tech Challenge to develop a portable long-range surveillance UAV. Our team were the runners up in the country final.

Drone Racing – I enjoy building and tuning drones and competing in drone races.

3d Printing – I enjoy doing 3d printing to make accessories for my drones and robots such as GoPro and motor mounts.

UTS Droid Racing Team 2018 Participant – Coded an Arduino to accept input values from a computer, interpret them and output the values to an electronic speed controller and servo.

Mentor for the Robotics IGS (International Grammar School) team competing in the FIRST Robotics competition in 2017.

Referees

Available upon request.