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Minibunny14

Sachram Singh

Profile

- Has independent skills as well as being able to work in a team.
- Able to adapt, learn new skills and pay attention to detail.
- Can solve engineering (electronic and software) problems both theoretically and practically.
- Excellent written and verbal communication skills.

Education

2023–Present **Bachelor of Engineering(Hons) in Software Engineering**,
Specialising in Embedded Systems,
Victoria University of Wellington, Wellington, New Zealand

Experience

2021–2023 **Part-time Production Staff**, *Balesses Kitchen Ltd*, Wellington
Operated and maintained industrial machinery, including cooling conveyors and large mixers, in a factory environment. Designed, built, and programmed an embedded laser-based system in C, aimed at detecting obstructions in the conveyor belt system, which alerts the operator via an alarm. This prototype is currently being tested.

Skills

- Programming Languages: Java, C/C++, Python, Git, Terminal, Assembly, C#, Javascript, Html, CSS.
- Able to design quick and efficient solutions for automation control problems.
- Experience with 3D modelling software such as Solid Works.
- Able to code debug and troubleshoot efficiently.
- Able to operate the Oscilloscope, Signal Generator, Multi-meter.
- Design and build analogue/digital circuits using physical components such as IC (integrated circuit), capacitors etc. as well as diagnosing circuit problems.
- Assemble PC's and computer systems from component parts.

Projects

- Designed, built and programmed in Embedded C, a laser based system. The system detects obstructions in a conveyor belt system and will inform the operator with an alarm upon detection. The prototype for this system is currently being tested at Balesses Kitchen Ltd. This can be viewed at: **Laser-Based-Obstruction-Detection-System**
- Designed, built and programmed in C++ an autonomous vehicle as part of a team project. The vehicle is designed to follow a line through a maze, which has some obstacles.
- Currently designing a automated irrigation control system. The system aims to automate the irrigation process, optimizing water usage based on real-time soil moisture levels, weather conditions, and plant requirements, ultimately enhancing crop yield and sustainability.
- Working on a repository of knowledge on the STM32 microcontroller. This can be viewed at: **Repository_Of_Knowledge-STM32-**
- Designed, Built and launched a personal portfolio website, this can be viewed at: **My_Portfolio**