SAI PULICKAL

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Passionate 4th -year Sustainable Design Engineering (SDE) student at the University of Prince Edward Island (UPEI). Thrives on taking challenges that require a strategic, sustainable, multi-disciplinary, and technical approach.

EDUCATION

SEPTEMBER 2019 – PRESENT (EXPECTED GRADUATION – MAY 2023) BACHELOR OF SCIENCE IN SUSTAINABLE DESIGN ENGINEERING UNIVERSITY OF PRINCE EDWARD ISLAND

- Engineering major with a specialization in Bio-resources.
- Exposure and experience working with different industrial software's like MATLAB, AutoCAD, SolidWorks, ANSYS Fluent, Arduino, and Autodesk.
- Relevant Coursework: 3 levels of Thermodynamics, Fluid mechanics, Statics & Dynamics, Strength of Materials, Machines and Automation, Material Science, Chemical Energy Conversion, Electric Circuits, Micro-Grids, 4 levels of Calculus and Linear Algebra.
- Good Academic standing

DEMONSTRATED SKILLS

- Adaptability
- Electric Circuits and designing Micro-grids.
- Team player, ability to multitask.
- Excellent on all Microsoft platforms

- Project Management
- Design Engineering
- Proficient in AutoCAD, Solidworks, Arduino, LOGOs Siemen, MATLAB, and ANSYS

EXPERIENCE

JUNE 2022 – SEPTEMBER 2022 STUDENT ENGINEER

PEI ENERGY SYSTEMS – ENWAVE ENERGY CORP., CHARLOTTETOWN

- Worked as a contract Student Engineer during the Summer.
- PEI Energy Systems' district energy plant converts municipal solid waste and biomass into electricity for the grid and thermal energy for 145 customers on the island.
- The job involved taking the inventory details such as part no., vendor info, serial number, and quantity of each part in all 145 substations and updating these in the Work Order management software MPulse.
- The job helped in gaining knowledge and exposure to different industry standards and types of equipment like Heat Exchangers, Valves, Actuators, Controllers, and thermocouples.

MAY 2021 – PRESENT SENIOR SPECIALIST, CLIENT OPERATIONS

TTEC CANADA

• Works for Booking.com. The job involves guiding agents in making the right decisions according to the guidelines, handling payout approvals, relocation approvals, and mass issues.

SEPTEMBER 2019 – AUGUST 2021

CUSTOMER SERVICE ASSOCIATE

WALMART CANADA, CHARLOTTETOWN

• Worked as a Part-time associate at Walmart. The job involved working in various departments like Electronics, Photo lab, and online order dispensing.

ACADEMIC CLINIC PROJECTS

SEPTEMBER 2020 - APRIL 2021

JUNIOR CLINIC PROJECT

NATURE CROPS INTERNATIONAL, KENSINGTON, PE

- Worked on the designing of an efficient packaging system for the client.
- Achieved on-budget performance and production targets through effective management of the design process and resources.
- Researched and analyzed customer design proposals, specifications, and other data. Used CAD for creating 3-D working models incorporating simulations.
- Completely automated the process of injecting additive into oil, using a micro-controller system.

JANUARY 2020 - MAY 2020

JUNIOR CLINIC PROJECT – FORT AMHERST

PARKS CANADA, CHARLOTTETOWN

- Re-designed Fort Amherst into a campground incorporating various activities and partnerships.
- Created professional, to-scale sketches and CAD works to communicate special requirements.
- Executed Eco-friendly and sustainable solutions.
- Created and kept exact budget details and minutes throughout the project.

SEPTEMBER 2021 – MAY 2022

SENIOR CLINIC PROJECT – CAVENDISH FARMS

CAVENDISH FARMS, PE

- 3rd-year clinic project at the University designing an automated duplex strainer used to filter effluent water to recycled water removing fat particles up to 50 microns in size.
- Created a simulation of the Ladder logic and control scheme for the final design.
- Created a P&I (Piping and Instrumentation) diagram and suggested the best available automated filtration system in the market with relevant support analysis.
- Maintained logbook entries throughout the duration of the project.

SEPTEMBER 2022 – PRESENT

SENIOR CLINIC PROJECT – SUNLY

SUNLY, CHARLOTTETOWN

- 4th-year clinic project at the University designing an automated Sun tracking system for the ground-mounted solar panel system based on recorded irradiance values.
- Proposed a dual-actuator design as the final solution incorporating sensors like LDRs, and an anemometer.
- Created ANSYS simulation to study the drag and lift forces acting on the panels. Conducted structural analysis of the racking system to determine the actuator ratings.
- Maintained logbook entries throughout the duration of the project.