Vijayesh Khullar

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Education

University of British Columbia (Ongoing) | BASc, Faculty of Applied Science

Experience

Math and English Tutor @ Kumon | November 2021 - June 2023

- Facilitated student learning by providing comprehensive instruction in Mathematics and English concepts and evaluated student progress through assignment grading, provided constructive feedback for improvement.
- Managed front desk operations, including seating assignments and communication with current and prospective students as well as parents, ensuring smooth administrative processes.

3D Printing Club | November 2021 - June 2023

- Founder and President of the club, leading and teaching members how to design and use 3D design software to create anything and 3D print using school printers

Projects

Technical Writer | Prime Health LTD | July - August 2023

- Developed clear and concise Standard Operating Procedures (SOPs) for packaging machines, enhancing operational efficiency and compliance.
- Collaborated with engineering teams to troubleshoot and resolve machine issues, minimizing downtime and optimizing performance.
- Continuously refined and updated documentation to reflect best practices and technological advancements.

Electric ATV (In Progress) | 2024

- Conversion of a gas-powered ATV to an electric-powered vehicle by integrating an electric motor
- Designing and constructing a custom battery from scratch to power the vehicle.
- Adapting the steering, suspension, and braking systems to ensure compatibility and optimal performance with the electric motor.

Hand Gesture Recognition System with Arduino-controlled 3D Printed Hand | 2024

- Utilized an open-source computer vision repository, integrating MediaPipe library in Python, to detect and classify hand gestures in real-time captured from a computer webcam..
- Engineered an Arduino-based microcontroller system to receive and interpret gesture commands from the computer vision application.
- Demonstrated proficiency in leveraging open-source tools and libraries, training machine learning models and hardware prototyping with Arduino to create a gesture control system.

Technologies

Languages: Python, Java, C, HTML5, Arduino, CSS, Javascript

Programs: GitHub, Eclipse, VSCode, LaTex, Solidworks, Cura, Matlab, Altium, Word