Meharpreet Singh Nanda

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GitHub: https://github.com/MSNanda515
Portfolio: https://msnanda515.github.io/Portfolio/

Engineering at Alberta

UNIVERSITY OF ALBERTA – ACADEMIC & CO-OP STATUS

Computer Engineering, BSc Co-op	Class of 2024	Cumulative Grade Point Average	3.8/4.0

TECHNICAL SKILLS

C++, MATLAB, Python, C, C#, ASP.Net, React, Unity, Java, Flutter, HTML/CSS, JavaScript, XML, SQL, Mongo DB, Docker, Kubernetes, Deep Learning, Git, Linux, VHDL, SolidWorks, MS Office Suite, blockchain, Load Balancer, Node JS

PROJECTS

- **'BestPrize'**, React, Node Js   *June 2021*
    - Developed a web application that finds the cheapest store for user's shopping list using React for the frontend, Node Js express server for backend, and used Selenium and web-driver to scrape the web.
- **'QuizTime'**, Java   *May 2021*
    - Developed a draft version of an Examination System using Swing and AWT to better understand OOPs and GUI concepts in Java
- **Navigation System**, C++   *April 2021*
    - Programmed the path finding agent of the server using Dijkstra's algorithm (using Edmonton's map data) and modeled the client-server architecture using sockets to communicate over the network
- **'MedAssist' App**, Flutter, HackEd 2021   *January 2021*
    - Laid out the wireframe of the app using Adobe XD, designed a responsive and intuitive UI/UX interface, implemented the login, signup and home page for the app using Flutter, and configured the app to employ Firebase Realtime Database and Google Maps API in its back end.
- **EPS Simulator**, C, AlbertaSat   *December 2020*
    - Developed an asynchronous multithreaded electronic power system simulator for a CubeSat implemented in C using POSIX pthread API and other IPC (inter-process communication) mechanisms, which got me a spot on the AlbertaSat software team

WORK & VOLUNTEER EXPERIENCE

- **Full Stack Developer,** *Clavis Studio, Alberta* (Part-time)   *July 2021 - November 2021*
    - Modify frontend web design using Angular and improve system performance.
- **Software Developer,** *AlbertaSat, Alberta* (Volunteer)   *January 2021 – Present*
    - Developed an interrupt driven command handler for the ARM based HPS (hard processor system) on Intel cyclone V SoC to enable communication between the OBC and the imaging payload system on the CubeSat
    - Assisted the team with documentation of the firmware and other software components on the satellite.
- **Deputy Avionics Team Lead,** *UASTARR, Alberta* (Volunteer)   *May 2020 – Present*
    - Managed a team of six using agile principles thereby increasing objective fulfillment by 40% compared to previous semesters
    - Designed the avionics bay while assisting in the research of the telemetry and the recovery system for the rocket
    - Assisted in the project management of the team using Agile tools and drafted project reports for competitions
- **Vehicle Controls Engineer,** *UAlberta Formula Racing EV Team, Alberta* (Volunteer)   *January 2021 – Present*
    - Designed a prototype of the brake system encoder (BSE) to be used in the vehicle ensuring that it meet the safety requirements of the competition
- **Electronics Sales Associate,** *Costco Wholesale, Alberta* (part-time)   *June 2020 – January 2021*
    - Provided high quality service by assisting over 50 customers daily with their electronics purchase while upholding brand standards and values to ensure customer satisfaction

AWARDS

- 2nd place at UAEC Junior Engineering Competition UAlberta – October 2020
- University of Alberta Undergraduate Leadership Award – September 2020
- Gold Medal in National Space Science Olympiad (NSSO) – November 2017