

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
Completed Academic Terms	4 of 8	Availability Starting May 2021	4 Months

TECHNICAL SKILLS

Java, C++, MATLAB, Python, C, Flutter, HTML/CSS, JavaScript, XML, SQL, Docker, Kubernetes, React, Deep Learning, Git, Linux, VHDL, SolidWorks, Adobe XD

PROJECTS

- **‘QuizTime’**, Java Standalone Application *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

- **Software Developer** **Edmonton, AB**
AlbertaSat, Volunteer *May 2020 – 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 (onboard computer) 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** **Edmonton, AB**
Student Team for Alberta Rocketry Research (STARR), 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 and drafting project reports for competitions
- **Vehicle Controls Engineer** **Edmonton, AB**
UAlberta Formula Racing EV Team, 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** **Edmonton, AB**
Costco Wholesale, Part-Time *June 2020 – Jan 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