

Arshdeep Singh Karwal

204-480-0407 || Arshdeepkarwal07@gmail.com || R2P 1P6, Winnipeg, Manitoba

SUMMARY AND OBJECTIVE

A highly motivated, and disciplined student with a strong work ethic currently pursuing a degree in B.Sc. Computer Engineering. Specializes in software systems and hands-on engineering design with creative and analytical problem solving skills. I am looking to expand my knowledge and skills by gaining experience in a professional manner.

EDUCATION

University of Manitoba

B.Sc. Computer Engineering; GPA: 4.2

Sep. 2024 – Present

Winnipeg, MB

- **UM Queen Elizabeth II and President's Scholarship** - Tier 1
- **Relevant Course Work:** Engineering Design and Communication, Analysis of Electrical Circuits and Digital Systems, Analysis of Structures in Equilibrium, Introductory Thermodynamics and Mechanics, Calculus I and II.

Maples Collegiate Institute

High School Diploma; Average: 97.4%

Sep. 2020 – June 2024

Winnipeg, MB

- **Honor Roll Student:** All years in high school.
- **Involvements:** Varsity Soccer, Varsity Track and Field, Peer Tutoring.

PROJECTS

Automated Waste Sorting System

- Developed a fully automated waste sorting system using an Arduino UNO and various motors and sensors.
- Created a functional program in the Arduino IDE using C++ through debugging and timing the motors and sensors cohesively.

Cardboard Chair

- Developed a fully functional chair made entirely out of recyclable materials using the engineering design process.
- Chair capable of holding up-to 100 kg with an assembly time of < 1 min. and a volume of 30 x 14.5 x 41 cm³.

PROFESSIONAL SKILLS

Teamwork

- Maintained constant communication and collaborated with a team of 5 engineering students through two major projects.
- Contributed to the team through providing proposed design sketches with accurate measurements to meet the technical specifications.

Project Management

- Planned and organized internal deadlines to meet team deliverables using Work Breakdown Structures, Gantt Charts, and Project Debriefs.
- Consulted with an external client to propose an Automated Waste Sorting System to improve waste collection and contamination on the University of Manitoba Campus.

Communication

- Experience gained through various technical reports, and poster presentations in room of up-to 200 people in several projects.

Technical Skills

- **Proficient** in Microsoft Office (Word, Excel, PowerPoint).
- **Intermediate** in programming languages such as Python and C++ and AutoCAD.