

# Arfaz Hossain

Victoria, British Columbia

[www.github.com/arfazhxss](https://www.github.com/arfazhxss)  
[www.linkedin.com/in/arfazhussain](https://www.linkedin.com/in/arfazhussain)  
[arfazhxss.ca/resume.pdf](https://arfazhxss.ca/resume.pdf)

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April 25, 2024

## **Kardium Ltd.**

Division: Head Office

Location: Burnaby, British Columbia

Dear Hiring Manager:

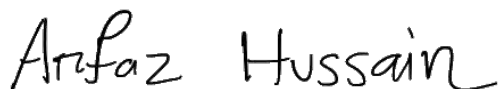
I am excited to apply for the **Software Simulation Developer - Co-op Placement** at **Kardium**. I am a software engineering student at the University of Victoria in British Columbia. I am eager to learn and grow in the field of computer and software engineering and I believe that this role will help me gain valuable work-experience related to my interests and help me acquire a practical understanding in a real-world setting.

**I have a fascination for developing web and mobile applications, and I am continually learning new skills through personal projects outside school.** I have been involved in more than 13 software development projects, which includes developing an iOS weather application in Swift Programming Language, making a 3D graphical simulation of a Rubik's Cube in OpenGL, C++ and developing web development projects in React, JavaScript and TypeScript. I have interests in the field of Visual Computing and Artificial Intelligence and have been taking an active interest in the field through my coursework and side-projects. I have been an active member in the *Engineering Students Society* and *UVic Students Society* where I have worked as a mentor during my second year as well as volunteered in multiple events besides engaging in development projects throughout my time.

**Throughout my academic endeavours, I have had the chance to learn the basic concepts of object-oriental programming, software development, software testing and evolution, advanced data structures and algorithms.** I have actively contributed to the *UVic Rocketry* and *VikeLabs* as a full-stack web developer, where I have spent much of my time collaborating and developing solutions to issues while reviewing codes mostly written in TypeScript and Python. My experience includes developing schemas in both MongoDB and PostgreSQL using Atlas, as well as other database tools and services especially Prisma, PlanetScale, and Mongoose. Throughout my projects, I have used automation and testing frameworks such as Selenium, Puppeteer, JUnit, Maven, Gradle. While working in teams at *UVic Rocketry*, I became familiar using ticketing tools, such as Jira and Kanban, which helped me gain insight into the importance of following Agile methodologies in a development environment. I strongly believe that I am adaptable and flexible when it comes to taking responsibilities and delivering results and am confident in my ability to quickly gain familiarity with new tools and techniques necessary to excel in this role.

**I am currently available for an 8-month work term and would be open to the possibility of participating in more than two consecutive terms.** Thank you for considering my application. I look forward to the opportunity to further discuss my skills and experience with Kardium.

Most Sincerely,



**Arfaz Hossain** (He/Him)  
Software Engineering Student,  
University of Victoria

# Arfaz Hossain

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[www.arfazhxss.ca](http://www.arfazhxss.ca)

## EDUCATION

### Bachelor of Software Engineering (BSEng)

University of Victoria

Sept. 2021 – Present

Victoria, BC

## TECHNICAL SKILLS

**Languages:** Java, Python, TypeScript, JavaScript, Objective-C (Swift), C++, HTML/CSS, R

**Frameworks and Libraries:** Node, Next.js, React, Express, Material, Shadcn, Tailwind

**Databases:** MySQL, PostgreSQL, SQLite, MongoDB, Redis, DynamoDB, CloudSQL

**Developer Tools:** Visual Studio, IntelliJ, JUnit, Eclipse, Maven, Gradle, Git, Docker

## SELECTED COLLABORATIVE PROJECTS

### Study Sprints

[github.com/VikeLabs/Study-Sprints](https://github.com/VikeLabs/Study-Sprints)

Feb 2024 – Present

Victoria, BC

- Collaborating with a team of 6 developers to create a full-stack Pomodoro application utilizing React with TypeScript, addressing users' time management requirements
- Utilizing Next.js framework for efficient routing and MongoDB for data storage and retrieval, to track and review past activities of users over the last day, month and year

### Ground Support System

[github.com/UVicRocketry/Ground-Support](https://github.com/UVicRocketry/Ground-Support)

Jul 2023 – Jan 2024

Victoria, BC

- Collaborated with a team of 13 developers in developing a full-stack telemetry visualization and post-flight analytical software for engineering students analyzing rocket performance in real-time
- Developed a total of 13 Material-UI components in React with TypeScript, ensuring type safety and fidelity to Figma designs, enhancing adaptability and usability across multiple platforms

## SELECTED PERSONAL PROJECTS

### Rubik's Cube (3D Simulation)

[github.com/arfazhxss/OpenGL-projects](https://github.com/arfazhxss/OpenGL-projects)

Feb 2023 – June 2023

Victoria, BC

- Developed a 3D simulation utilizing OpenGL libraries GLUT, GLFW, and GLM, incorporating graphics rendering techniques through GLSL (Shader Language) for visualizations, mathematical operations
- Implemented intuitive keyboard and mouse controls, including precise cube rotations with keys such as L, J, I, K, and dynamic zoom functionalities with keyboard shortcuts

### Simple Weather Application (iOS)

[github.com/arfazhxss/Weather-Application](https://github.com/arfazhxss/Weather-Application)

Apr 2023 – Nov 2023

Victoria, BC

- Developed a simple iOS application using Swift programming language on object-oriented programming principles, ensuring a modular and maintainable codebase
- Implemented a user-friendly interface that seamlessly integrates with OpenWeather API, allowing users to access and navigate through accurate weather information for their current city

## RELEVANT EXPERIENCES

### Software Team Lead

VikeLabs

Feb 2024 – Present

Victoria, BC

- Simultaneously working in 3 full-stack projects *courseup*, *coopme* and *study-sprints* facilitating collaboration with team leads through meetings and progress tracking across teams

### Graphics Coordinator

Engineering Student's Society

Jan 2023 – Present

Victoria, BC

- Designed and illustrated a total 15+ posters and 20+ social media posts while managing office hours to ensure the availability of the student lounge, maintaining websites and social media accounts

### Grocery Clerk

Save On Foods

Sept. 2021 – Aug 2023

Victoria, BC

- Oversaw store operations in a 10-to-12-member team while addressing 50 inquiries each shift, maintaining inventory through detailed stock records and rotations, helping in reducing stock shortages by 7%

## HONORS AND AWARDS

- Recipient of University of Victoria's International Entrance Scholarship

2021 – 2022

# UNOFFICIAL TRANSCRIPT OF STUDIES AT THE UNIVERSITY OF VICTORIA

## FOR Arfaz Hossain (V00984826) AS OF 24 Apr 2024

If you require additional information please consult the University of Victoria calendar  
by copying and pasting the following link to your browser: <http://uvic.ca/calendar/>

### Course History at the University of Victoria

SESSION	COURSE	DESCRIPTION	UNIT VALUE	GRADE	GRADE POINT	AWARDED UNITS	NOTE	COMPARATIVE MEAN	SIZE
ACADEMIC RECORD FOR UNDERGRADUATE STUDIES EXCLUDING LAW PROGRAMS									
WINTER 2021-2022									
First Term: Sep - Dec 2021									
ENGINEERING B.ENG. (CO-OP ENGINEERING)									
	ENGR 110	DESIGN AND COMMUNICATION I	2.5	76% B	5	2.5		79%	166
	ENGR 130	INTRODUCTION TO PROFESSIONAL PRACTICE	0.5	79% B+	6	0.5		87%	204
	MATH 100	CALCULUS I	1.5	72% B-	4	1.5		72%	209
	MATH 110	MATRIX ALGEBRA FOR ENGINEERS	1.5	75% B	5	1.5		69%	135
Second Term: Jan - Apr 2022									
ENGINEERING B.ENG. (CO-OP ENGINEERING)									
	CSC 111	FUNDAMENTALS OF PROGRAMMING WITH ENGINEERING APPLICATIONS	1.5	78% B+	6	1.5		61%	117
	MATH 101	CALCULUS II	1.5	66% C+	3	1.5		73%	180
	MATH 122	LOGIC AND FOUNDATIONS	1.5	81% A-	7	1.5		73%	75
	PHYS 110	INTRODUCTORY PHYSICS I	1.5	75% B	5	1.5		57%	129
SESSIONAL GPA = 5.04 (05MAY2022)									
CREDIT IN 12.0 UNITS									
IN GOOD ACADEMIC STANDING (05MAY2022)									
SUMMER 2022									
Summer Session: May - Aug 2022									
ENGINEERING B.ENG. (CO-OP ENGINEERING)									
	CSC 115	FUNDAMENTALS OF PROGRAMMING II	1.5	76% B	5	1.5		74%	91
SESSIONAL GPA = 5.00 (17AUG2022)									
CREDIT IN 1.5 UNITS									
IN GOOD ACADEMIC STANDING (22AUG2022)									
WINTER 2022-2023									
First Term: Sep - Dec 2022									
ENGINEERING B.S.ENG. SOFTWARE ENGINEERING (CO-OP ENGINEERING)									
	CSC 225	ALGORITHMS AND DATA STRUCTURES I	1.5	53% D	1	1.5		73%	196
	ECON 180	INTRODUCTION TO ECONOMICS AND FINANCIAL PROJECT EVALUATION	1.5	90% A+	9	1.5		81%	150
	SENG 265	SOFTWARE DEVELOPMENT METHODS	1.5	70% B-	4	1.5		70%	196

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Second Term: Jan - Apr 2023									
ENGINEERING B.S.ENG. SOFTWARE ENGINEERING (CO-OP ENGINEERING)									
	CSC 230	INTRODUCTION TO COMPUTER ARCHITECTURE	1.5	63% C	2	1.5		76%	127
	ENGR 120	DESIGN AND COMMUNICATION II	2.5	88% A	8	2.5		87%	173
	ENGR 141	ENGINEERING MECHANICS	1.5	65% C+	3	1.5		71%	103
	STAT 260	INTRODUCTION TO PROBABILITY AND STATISTICS I	1.5	65% C+	3	1.5		79%	138
SESSIONAL GPA = 4.61 (08MAY2023)									
CREDIT IN 11.5 UNITS									
IN GOOD ACADEMIC STANDING (08MAY2023)									
SUMMER 2023									
Summer Session: May - Aug 2023									
ENGINEERING B.S.ENG. SOFTWARE ENGINEERING (CO-OP ENGINEERING)									
	CSC 226	ALGORITHMS AND DATA STRUCTURES II	1.5	65% C+	3	1.5		82%	107
	PHIL 201	CRITICAL THINKING	1.5	70% B-	4	1.5		73%	298
	SENG 275	SOFTWARE TESTING	1.5	74% B	5	1.5		81%	45
	SENG 310	HUMAN COMPUTER INTERACTION	1.5	92% A+	9	1.5		83%	103
SESSIONAL GPA = 5.25 (18AUG2023)									
CREDIT IN 6.0 UNITS									
IN GOOD ACADEMIC STANDING (21AUG2023)									
CUMULATIVE GPA: 4.92									
WINTER 2023-2024									
First Term: Sep - Dec 2023									
ENGINEERING B.S.ENG. SOFTWARE ENGINEERING (CO-OP ENGINEERING)									
	ASTR 101	EXPLORING THE NIGHT SKY	1.5	68% C+	3	1.5		67%	23
	CHEM 101	FUNDAMENTALS OF CHEMISTRY FROM ATOMS TO MATERIALS	1.5	49% F	0	0.0		70%	316
	CSC 370	DATABASE SYSTEMS	1.5	57% D	1	1.5		66%	130
	ECE 260	CONTINUOUS-TIME SIGNALS AND SYSTEMS	1.5	20% F	0	0.0		67%	96

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SESSION	COURSE	DESCRIPTION	UNIT VALUE	GRADE	GRADE POINT	AWARDED UNITS	NOTE	COMPARATIVE MEAN	SIZE
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#### Second Term: Jan - Apr 2024

##### ENGINEERING B.S.ENG.

##### SOFTWARE ENGINEERING

##### (CO-OP ENGINEERING)

CSC	305	INTRODUCTION TO COMPUTER	1.5	CONTINUING					
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GRAPHICS

CSC	320	FOUNDATIONS OF COMPUTER SCIENCE	1.5	CONTINUING					
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ECE	363	COMMUNICATION NETWORKS	1.5	CONTINUING					
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SENG	371	SOFTWARE EVOLUTION	1.5	CONTINUING					
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STANDING PENDING GRADES (22APR2024)

#### SUMMER 2024

#### Summer Session: May - Aug 2024

##### ENGINEERING B.S.ENG.

##### SOFTWARE ENGINEERING

##### (CO-OP ENGINEERING)

CHEM	101	FUNDAMENTALS OF CHEMISTRY FROM	1.5	REGISTERED					
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ATOMS TO MATERIALS

CSC	320	FOUNDATIONS OF COMPUTER SCIENCE	1.5	REGISTERED					
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ECE	260	CONTINUOUS-TIME SIGNALS AND	1.5	REGISTERED					
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SYSTEMS

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