Arfaz Hossain

Victoria, British Columbia

April 25, 2024

Kardium Inc.

Division: Head Office

Location: Burnaby, British Columbia

Dear Hiring Manager:

I am excited to apply for the **Biomedical Algorithms - 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,

Arrfaz Hussain

University of Victoria

Arfaz Hossain

+1 (250) 880 8402 | arfazhussain@uvic.ca | linkedin.com/in/arfazhussain | github.com/arfazhxss

www.arfazhxss.ca

EDUCATION

Bachelor of Software Engineering (BE)

University of Victoria

Sept. 2021 - PresentVictoria, BC

TECHNICAL SKILLS

Languages: Java, Python, TypeScript, JavaScript, Objective-C (Swift), C++, HTML/CSS, R Frameworks and Libraries: Node, Next.js, React, Express, Material, Shadon, Tailwind Databases: MySQL, PosgreSQL, 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

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/UV icRocketry/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

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

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

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/

| ourse History a | at the Un | iversity o | of Victoria | | | | | | | |
|-----------------|-----------------------------------------------|------------------|-----------------------------------------------------------------------------|----------|---------------------|-------------|------------------|------|----------------|---------------|
| SESSION COURSE | | SE | DESCRIPTION | | UNIT GRADE VALUE | | AWARDED UNITS | NOTE | COMPAR MEAN | ATIVE SIZE |
| | | AC | ADEMIC RECORD FOR UNDERGRADUATE S | TUDIES E | XCLUDING | S LAW PF | ROGRAMS | | | |
| WINTER 2021 | -2022 | | | | | | | | | |
| | Sep - Dec ERING B.I P ENGINI | ENG. | | | | | | | | |
| (0-00) | ENGR | 110 | DESIGN AND COMMUNICATION I | 2.5 | 76% E | 3 5 | 2.5 | | 79% | 16 |
| | ENGR | 130 | INTRODUCTION TO PROFESSIONAL PRACTICE | 0.5 | 79% E | | 0.5 | | 87% | 20 |
| | MATH | 100 | CALCULUS I | 1.5 | 72% E | 3- 4 | 1.5 | | 72% | 20 |
| | MATH | 110 | MATRIX ALGEBRA FOR ENGINEERS | 1.5 | 75% E | 5 | 1.5 | | 69% | 13 |
| | ERING B.I P ENGINI | ENG. EERING) | | | | | | | | |
| | CSC | 111 | FUNDAMENTALS OF PROGRAMMING WITH ENGINEERING APPLICATIONS | 1.5 | 78% E | | 1.5 | | 61% | 11 |
| | MATH | 101 | CALCULUS II | 1.5 | 66% C | | 1.5 | | 73% | 18 |
| | MATH | 122 | LOGIC AND FOUNDATIONS | 1.5 | 81% <i>A</i> | | 1.5 | | 73% | 75 |
| | CREDIT | IN 12.0 | INTRODUCTORY PHYSICS I A = 5.04 (05MAY2022) UNITS EMIC STANDING (05MAY2022) | 1.5 | 75% E | 3 5 | 1.5 | | 57% | 12 |
| SUMMER 2022 | 2 | | | | | | | | | |
| | ession: Ma ERING B.I P ENGINI CSC | ÉNG. | 022 FUNDAMENTALS OF PROGRAMMING II | 1.5 | 76% E | 3 5 | 1.5 | | 74% | 91 |
| | SESSIC | NAL GP | A = 5.00 (17AUG2022) | 1.5 | 7070 E | , 3 | 1.0 | | 7470 | J |
| WINTER 2022 | | | | | | | | | | |
| SOFT\ | Sep - Dec ERING B.: WARE EN P ENGINI | S.ENG. GINEER | NG | | | | | | | |
| (500 | CSC | 225 | ALGORITHMS AND DATA STRUCTURES I | 1.5 | 53% E |) 1 | 1.5 | | 73% | 19 |
| | ECON | 180 | INTRODUCTION TO ECONOMICS AND FINANCIAL PROJECT EVALUATION | 1.5 | 90% A | \+ 9 | 1.5 | | 81% | 15 |
| | SENG | 265 | SOFTWARE DEVELOPMENT METHODS | 1.5 | 70% E | 3- 4 | 1.5 | | 70% | 19 |

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| Course History a | at the Un | iversity o | of Victoria | | | | | | | | |
|------------------|-----------------------------------------------|--------------------|---------------------------------------------------|---------------|------|----|----------------|------------------|------|----------------|----------------|
| SESSION | COUR | RSE | DESCRIPTION | UNIT VALUE | GRAD | E | GRADE POINT | AWARDED UNITS | NOTE | COMPAR MEAN | RATIVE SIZE |
| SOFT | m: Jan - A ERING B. WARE EN P ENGINI | S.ENG. IGINEERI | NG | | | | | | | | |
| (3.2.2 | CSC | 230 | INTRODUCTION TO COMPUTER ARCHITECTURE | 1.5 | 63% | С | 2 | 1.5 | | 76% | 127 |
| | ENGR | 120 | DESIGN AND COMMUNICATION II | 2.5 | 88% | | 8 | 2.5 | | 87% | 173 |
| | ENGR | 141 | ENGINEERING MECHANICS | 1.5 | 65% | | 3 | 1.5 | | 71% | 103 |
| | STAT | 260 | INTRODUCTION TO PROBABILITY AND STATISTICS I | 1.5 | 65% | C+ | 3 | 1.5 | | 79% | 138 |
| | SESSIC | NAL GP | A = 4.61 (08MAY2023) | | | | | | | | |
| | | TIN 11.5 | | | | | | | | | |
| | | D ACADI | EMIC STANDING (08MAY2023) | | | | | | | | |
| SUMMER 202 | - | | | | | | | | | | |
| SOFT | ERING B. WARE EN P ENGINI | S.ENG. IGINEERI | NG | | | | | | | | |
| | CSC | 226 | ALGORITHMS AND DATA STRUCTURES II | 1.5 | 65% | | 3 | 1.5 | | 82% | 107 |
| | PHIL | 201 | CRITICAL THINKING | 1.5 | 70% | | 4 | 1.5 | | 73% | 298 |
| | SENG | 275 | SOFTWARE TESTING | 1.5 | 74% | | 5 | 1.5 | | 81% | 45 |
| | SENG | 310 | HUMAN COMPUTER INTERACTION | 1.5 | 92% | A+ | 9 | 1.5 | | 83% | 103 |
| | | | A = 5.25 (18AUG2023) | | | | | | | | |
| | | TIN 6.0 | | | | | | | | | |
| CUMULA | | | EMIC STANDING (21AUG2023) | | | | | | | | |
| | | 1. 4.32 | | | | | | | | | |
| WINTER 2023 | - | 2022 | | | | | | | | | |
| SOFT | Sep - Dec ERING B. WARE EN P ENGINI | S.ENG. IGINEERI | NG | | | | | | | | |
| • | 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 | COUF | RSE | DESCRIPTION | UNIT VALUE | GRADE | GRADE POINT | AWARDED UNITS | NOTE | COMPARATIVE MEAN SIZE |
| SOFT | rm: Jan - A ERING B. WARE EN OP ENGIN CSC | S.ENG. IGINEER | | 1.5 | CONTINUI | NC | | | |
| | CSC | 303 | GRAPHICS | 1.5 | CONTINUI | NG | | | |
| | CSC | 320 | FOUNDATIONS OF COMPUTER SCIENCE | 1.5 | CONTINUI | | | | |
| | ECE | 363 | COMMUNICATION NETWORKS | 1.5 | CONTINUI | NG | | | |
| | SENG | 371 | SOFTWARE EVOLUTION | 1.5 | 5 CONTINUING | | | | |
| | STAND | ING PEN | DING GRADES (22APR2024) | | | | | | |
| SUMMER 202 | 24 | | | | | | | | |
| SOFT | ession: Ma ERING B. WARE EN OP ENGIN | S.ENG. IGINEER | ING | | | | | | |
| , | CHEM | 101 | FUNDAMENTALS OF CHEMISTRY FROM ATOMS TO MATERIALS | 1.5 | REGISTER | RED | | | |
| | CSC | 320 | FOUNDATIONS OF COMPUTER SCIENCE | 1.5 | REGISTER | RED | | | |
| | ECE | 260 | CONTINUOUS-TIME SIGNALS AND SYSTEMS | 1.5 | REGISTER | RED | | | |
| END OF TRANSCRIPT | | | | | | | | | |