Arfaz Hossain

Victoria, British Columbia

May 6, 2024

Copperleaf Technologies

Division: Human Resource

Location: Vancouver, British Columbia

Dear Hiring Manager:

I am excited to apply for the **Software Development in Artificial Intelligence Innovation Co-op Placement** at **Copperleaf**. 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 Copperleaf.

Most Sincerely,

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

Arrfaz Hussain_

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

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SESSION COURSE		SE	DESCRIPTION	UNIT VALUE		GRADE POINT	AWARDED UNITS	NOTE	COMPAR MEAN	ATIVE SIZE
		AC	ADEMIC RECORD FOR UNDERGRADUATE S	TUDIES E	XCLUDIN	3 LAW PF	ROGRAMS			
WINTER 2021-	-2022									
First Term: \$ ENGINEE		ENG.								
(00-01)	ENGR	110	DESIGN AND COMMUNICATION I	2.5	76% I	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%	209
	MATH	110	MATRIX ALGEBRA FOR ENGINEERS	1.5	75% l	3 5	1.5		69%	135
Second Terr ENGINES (CO-O	ERING B.I P ENGINI	ENG. EERING)								
	CSC	111	FUNDAMENTALS OF PROGRAMMING WITH ENGINEERING APPLICATIONS	1.5		3+ 6	1.5		61%	117
	MATH	101	CALCULUS II	1.5	66% (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%	129
SUMMER 2022	2									
Summer Se ENGINEE (CO-O		ÉNG.	022 FUNDAMENTALS OF PROGRAMMING II	1.5	76% I	3 5	1.5		74%	91
	SESSIC CREDIT	NAL GPA	A = 5.00 (17AUG2022)	1.5	7070	3	1.0		7470	01
WINTER 2022-	-2023									
		S.ENG. GINEER	NG							
(33 3)	CSC	225	ALGORITHMS AND DATA STRUCTURES I	1.5	53% I) 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% E	3- 4	1.5		70%	196

Course History a	at the Un	iversity c	of Victoria							
SESSION	COUR	SE	DESCRIPTION	UNIT VALUE	GRADE GRADE POINT		AWARDED UNITS	NOTE	COMPAR MEAN	RATIVE SIZE
		S.ENG. GINEERI	NG							
(CSC	230	INTRODUCTION TO COMPUTER ARCHITECTURE	1.5	63%	2	1.5		76%	127
	ENGR ENGR	120 141	DESIGN AND COMMUNICATION II ENGINEERING MECHANICS	2.5 1.5	88% <i>i</i> 65% (2.5 1.5		87% 71%	173 103
	STAT	260	INTRODUCTION TO PROBABILITY AND STATISTICS I	1.5	65%	C+ 3	1.5		79%	138
	CREDIT	IN 11.5	A = 4.61 (08MAY2023) UNITS EMIC STANDING (08MAY2023)							
SUMMER 2023	3									
	ERING B.: WARE EN P ENGINI	S.ENG. GINEERI EERING)	NG							
	CSC PHIL	226	ALGORITHMS AND DATA STRUCTURES II	1.5	65%		1.5		82%	107
	SENG	201 275	CRITICAL THINKING SOFTWARE TESTING	1.5 1.5	70% 74%		1.5 1.5		73% 81%	298 45
	SENG	310	HUMAN COMPUTER INTERACTION	1.5	92%		1.5		83%	103
	SESSIC	NAL GPA	A = 5.25 (18AUG2023)							
CUMULA	IN GOO		UNITS EMIC STANDING (21AUG2023)							
WINTER 2023-	-2024									
	ERING B.: WARE EN P ENGINI	S.ENG. GINEERI								
	ASTR CHEM	101 101	EXPLORING THE NIGHT SKY FUNDAMENTALS OF CHEMISTRY FROM	1.5 1.5	68% (49% (1.5 0.0		67% 70%	23 316
	CSC	370	ATOMS TO MATERIALS DATABASE SYSTEMS	1.5	57%	D 1	1.5		66%	130
	ECE	260	CONTINUOUS-TIME SIGNALS AND SYSTEMS	1.5	20%	= 0	0.0		67%	96

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SESSION	COUF	RSE	DESCRIPTION	UNIT VALUE	GRADE GRADE POINT		AWARDED UNITS	NOTE	COMPAR MEAN	ATIVE SIZE
SOFT	rm: Jan - A ERING B. WARE EN OP ENGIN	S.ENG. IGINEER								
(CSC	305	INTRODUCTION TO COMPUTER GRAPHICS	1.5	90% A-	+ 9	1.5		82%	108
	ECE	363	COMMUNICATION NETWORKS	1.5	73% B	5	1.5		81%	100
	CSC	320	FOUNDATIONS OF COMPUTER SCIENCE	1.5	CONTINUI	NG				
	SENG	371	SOFTWARE EVOLUTION	1.5	CONTINUI	NG				
	STAND	ING PEN	DING GRADES (22APR2024)							
SUMMER 202	4									
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									

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	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 202	2									
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WINTER 2022										
SOFT	Sep - Dec ERING B.: WARE EN P ENGINI	S.ENG. GINEER	ING							
(55.0	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
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		TIN 6.0	UNITS EMIC STANDING (21AUG2023)								
CUMULA [*]			21/11/2017								
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	ECE CSC SENG STAND	363 320 371 ING PEN	COMMUNICATION NETWORKS FOUNDATIONS OF COMPUTER SCIENCE SOFTWARE EVOLUTION IDING GRADES (22APR2024)	1.5 1.5 1.5	73% B CONTINUI CONTINUI		1.5		81%	100
SUMMER 202			(====,							
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 ECE	320 260	FOUNDATIONS OF COMPUTER SCIENCE CONTINUOUS-TIME SIGNALS AND SYSTEMS	1.5 1.5	REGISTER REGISTER					
END OF TRANSCRIPT										