

# Zeja Cai

## Junior Software Application Developer

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Vancouver, BC

*Highly motivated and recently graduated software engineer with strong problem-solving skills and a commitment to excellence, eager to leverage academic knowledge and practical project experience to contribute effectively to a dynamic and collaborative team as a Software Engineer.*

### TECHNICAL SKILLS

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- Proficient in **C/C++, C#, Python, Java, Kotlin, SQL**, and more
- Work experience with **serverless technologies**: Google Cloud Function/Run, and AWS Lambda
- Knowledge and hand-on experience with **microservices and event-driven architecture**
- Experience with **Client-server architecture, Networking**
- Experience with version control systems such as **Git**
- Proficiency in **Windows/Linux/Unix** operating systems and **shell scripting**
- Hand-on experience with **database administration, database installation and security**

### TRANSFERRABLE SKILLS

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- Good **communication and team management skills** by working in fast paced environments
- Strong **problem solving** and analyzing skills developed from coursework and self-learning projects
- Capable to **quickly learn** leading-edge technologies
- Tri-lingual in **English, Cantonese, and Mandarin**

### WORK EXPERIENCE

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#### SFU - CS Research Assistant

Jan 2024 - current

Burnaby, BC

- Designed and implemented a new software tool in **C#** to help users to add **human-interactive** components to their 3D models in Rhinoceros
- Performed **agile software development**, incorporating **UX design** and **OOP methodologies** to enhance user experience and maintain code quality
- Demonstrated **problem-solving skills** and ability to **quickly learn and adapt** to new technologies, including 3D models, C#, Rhinoceros, and Grasshopper
- **Collaborated with a multidisciplinary team** of graduate students to develop the software based on their needs

## PROJECTS EXPERIENCE

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### Educational Resource Website - Architect

Feb 2024 - Apr 2024

- Designed and developed a high availability and high scalability web system in **Microservices Architecture** using the **Spring Boot** framework
- Implemented the system to be deployed using **serverless technologies**: Google Cloud Run, and Google Cloud Functions
- Utilized load balancing and service discovery mechanisms with Nacos to ensure a **multi-region deployment** of the system
- Adapted resiliency patterns to ensure **fault tolerance and high availability**

### Rapid Medical Imaging Examination - Creator

Sep 2023 - Dec 2023

- Designed and built an **AI-based** multi-task detector website for medical image analysis in **Python**
- Implemented a breast tumor classification tool and bone fracture classification tool. Also merged COVID-Net model into the platform to be a COVID detection tool.
- **Collaborated with a team of 5** to ensure timely project delivery while adhering to best practices.

### Chat Now Mobile App - Creator

Dec 2022 - Apr 2022

- Developed the conceptual framework, functionality, and features of the app
- Designed a robust, efficient, and scalable **database schema** following **database normalization**
- Utilized **Redis** for caching and **MySQL** for storing chat records and user information
- Implemented the backend services of the software using **Kotlin**: notification service, cloud database, local database and communication system

### Deny and Conquer Game - Creator

Jul 2023 - Aug 2023

- Implemented a multi-players game that built on a **client-server architecture** that uses **TCP** in **Python**
- Designed the **multi-threading architecture** to handle multiple client connection and **locks** to manage shared resources

## EDUCATION

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### Simon Fraser University - B.S., Computer Science

Sep 2019 - Apr 2024

8888 University Dr W, Burnaby, BC V5A 1S6

#### Relevant courses

- Web Systems Architecture - Serverless
- Data Communications and Networking
- Database Systems
- System Security and Privacy
- Software Development