# Raymond B. Bian

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# **Education**

# Georgia Institute of Technology | Atlanta, GA

Anticipated Graduation: May 2026

- Candidate for Bachelor of Science in Computer Science
- Relevant Coursework: Data Structures and Algorithms, Honors Discrete Math, Combinatorics

#### **Experience**

#### Dalian Mother's English Consulting Co.

May 2022 – Present

Project Manager/Lead Developer

Dalian, China

- Developing web app to store volunteer hours and training information in an accessible database.
- Spearheading weekly meetings; coordinating design, layout, and functionality of 20+ pages.
- Utilizing Python, FastAPI, and MySQL to implement the back-end; React.js for the front-end.

### **Epoch Technologies Dalian, Co. Ltd.**

*June 2021 – September 2021* 

**Business English Teacher** 

Dalian, China

- Taught business English lessons twice weekly to 25 workforce professionals.
- Created lesson plans, interactive activities, and engaging assignments to foster use of English.
- Developed communication skills in a professional workforce environment across language barriers.

#### Clubs

## VGDev - Skylei | C++, OpenGL, ImGUI

*August 2023 – Present* 

Developer

Atlanta, Georgia

- Collaborating with designers, sound/tech artists to develop game and custom game engine in C++.
- Utilizing Bullet API, ImGUI, and OpenGL to implement features such as physics and air acceleration.

## **Competitive Programming @ Tech**

August 2023 – Present

#### **Projects**

#### Dance Choreography AI - Choreolyzer | Pytorch, OpenCV, Flask, React

- Developed a Multi Object Tracking-based website for dancers to automate choreography analysis using React and Flask.
- Created Object Detection and Multi Object Tracking (MOTRv2) data pipelines using Pytorch to extract dance formations
- Converted object-tracking data to bird's eye view using OpenCV and Geometric Image Transformation

## **LoL Cooldown Tracker** | C++, ImGUI, IDA Pro, ReClass

- Utilized IDA Pro to analyze dumped game binaries, ReClass to scan memory realtime to reverse engineer and locate offsets of camera matrices, ability cooldowns, and object manager trees in memory.
- Developed user-friendly interactive menu and efficient overlay with ImGUI.

#### **USACO Checklist App** | HTML, CSS, Python, FastAPI, Postman, SQL

- Developed web application to store and track progress on 500+ USACO problems.
- Reverse engineered USACO servers with Postman, wrote web scraper to sync problem progress.
- Built JSON web token authentication system to enable sharable progress sync between devices.

# **Prom Seating Registration** | React.js, Python, FastAPI

- Coded intuitive, interactive map to prepare and organize seating for 200 prom attendees.
- Implemented email verification system to prevent duplicate reservations.
- Coordinated and instructed student government peers to direct peers at event.

#### Skills

**Programming Languages:** Java, Python, C++, JavaScript, SQL

Technologies: FastAPI, React.js, Git, GitHub, Postman

Platforms: Linux (Ubuntu, Arch), Windows

**Languages:** English (fluent), Chinese (conversational)