Sajan Senghera

[604-612-7739] | sns12@sfu.ca | LinkedIn | Github | Burnaby, B.C.

TECHNICAL SKILLS

Languages: Python, Java, C++, C, C#, Javascript, HTML/CSS, and Bash

Frameworks: Flask and BeautifulSoup

Developer Tools: Git, Visual Studio, IntelliJ, AWS, Google Cloud AI, and ChatGPT/Claude **Libraries**: Matplotlib, discord.py, asyncio, fuzzywuzzy, google generativeai, requests, and Bootstrap

Relevant Experience

STEAM & Coding Instructor

May 2024 – Present

Science Alive Vancouver, BC

- Led interactive STEM workshops across Lower Mainland elementary schools, teaching web development and programming concepts
- Designed and implemented technology summer camps for grades 1-8, focusing on web development, game design, and robotics
- Developed custom curriculum materials integrating LEGO Spike Prime and fundamental programming concepts
- \bullet Mentored over 100 students in various programming languages and technologies

Camp Facilitator

robotics

Jun. 2023 – Sep. 2023

Steamoji Vancouver, BC

- Instructed youth aged 7-12 in advanced technical subjects including Arduino, Python programming, and VEX
- Implemented hands-on learning approaches resulting in 90% positive student engagement
- Created and adapted teaching materials for various skill levels and learning styles

Projects

CourseBot | Python, AWS, Flask, Generative AI

Sep. 2024 – Present

- Engineered a Discord bot to streamline SFU course selection using web scraping and AI technologies
- Implemented course recommendation system using Google Generative AI and BeautifulSoup for data extraction
- Deployed microservices architecture using AWS Lambda for bot hosting and EC2 for database updates
- Integrated multiple data sources including RateMyProfessor and CourseDigger for comprehensive course insights

AWS Game Builder- Dungeon Crawler | Generative AI, C#, Monogame, AWS Services Nov. 2024 - Present

- Lead a team in engineering a dungeon crawler game for the Amazon Game Jam Hackathon
- Used C# object oriented programming and the Monogame library in order to design the game, with Amazon Q Generative AI being used to generate props and DynamoDB being used to save users data
- Developed an dynamic level generation algorithm using A* path-finding to ensure that each room was possible and cellular automata to properly distribute props throughout each room

EDUCATION

Simon Fraser University (SFU)

Sep. 2023 – Present

Burnaby, BC

Bachelor of Science in Computing Science

• GPA: 3.3/4.33

• SFU Undergraduate Scholars Entrance Scholarship with Distinction recipient

Interests

Machine Learning, AI, Cloud Computing, and Software Development