

JOSH PHANG

linkedin.com/in/joshphang
joshua.phang999@gmail.com
(236)-818-5141

EDUCATION

09/2021 – 05/2025 **UNIVERSITY OF NORTHERN BRITISH COLUMBIA**
BSc Computer Science, Minor in Mathematics

- Current GPA of 4.01

WORK EXPERIENCE

09/2022 – 08/2024 **CODE NINJAS – RICHMOND, BC**
Coding Instructor

- Introduced elementary and middle school students to code creation and simple game design with a team of instructors to facilitate early learning and interest in coding.
- Taught important fundamental concepts such as objects, conditionals, and loops through Scratch and JavaScript in a fun and engaging way, ultimately expanding our facility from less than 50 students to over 150 young coders.
- Reinforced strong and proper coding foundations that led to a student winning first place in Code Ninja's *International Ghostly Game Jam*

PROJECTS

01/2024 – 04/2024 **CREDIT CARD FRAUD DETECTION USING MACHINE LEARNING**
Research Paper

- Teamed up with a graduate student to work on a research project regarding the improvement of credit card fraud detection by using different machine learning models in combination with various sampling techniques including SMOTE and Random Under Resampling.
- Testing results were produced by applying and fine-tuning SVC, Logistic Regression, MLP, and Decision Tree models on a European dataset taken in 2013 totaling 284,870 transactions.
- Applied ensemble techniques such as bagging, but found that these actually reduced performance when combined with sampling techniques in this use case.
- Used scikit-learn and TensorFlow libraries in Jupyter and Google Colab in addition to the Seaborn library for data visualization.

PROJECTS CTND.

- Results of the experiment achieved a 99.992% accuracy with a ROC-AUC score of 0.99 when using a SVC model in combination with SMOTE sampling techniques,

06/2022 –
08/2022

PERSONGIFY

Full-stack web development

- Worked in a team of 5 to develop a full stack web application, working in an Agile development environment to improve project-wide communication and hasten project delivery.
- Developed an application that provided users the ability to create Spotify playlists based on their personal preferences and commute times. Implemented functionality for saving playlists to user's Spotify accounts and sharing on Facebook feeds.
- Developed back-end functions for API calls in NodeJS for secure and reliable data retrieval and updating of Spotify accounts and playlists.
- Implemented database support using PostgreSQL enabling secure user account creation with SHA-2 password encryption.
- Utilized Spotify API calls for playlist generation, account management, and song playback features.
- Utilized Google Maps API calls for commute time calculation and location tracking, and Facebook API calls for sharing of generated playlists.

RELEVANT COURSEWORK – UNBC

- | | |
|---|---|
| • <i>Algorithm Analysis & Development</i>
(CPSC 200) | • <i>Introduction to Database Systems</i>
(CPSC 324) |
| • <i>Data Structures I</i> (CPSC 281) | • <i>Applied Machine Learning</i> (CPSC 499) |
| • <i>Software Engineering</i> (CPSC 300) | |

SKILLS

- | | | |
|----------------------|-----------------------------|---------------------------|
| • C++, Java, Python | • .NET Core, Angular, Git | • Excellent communication |
| • HTML, CSS, JS | • Jupyter, Google Colab | and organizational skills |
| • NodeJS, PostgreSQL | • TensorFlow, sci-kit learn | • Works well with a team |