# ARYAN SAFARI



#### CONTACT

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# EDUCATION AND TRAINING

Bachelor of Science -Computer Science

University of California San Diego

La Jolla, CA 12/2019- 03/2023

#### Skills

C, C++, Java, Python, Git,

Sql, Excel, Linux,

Assembly,

Microsoft Office

#### SUMMARY

 As a fast learner and a hard worker, I'm ready to take up any challenge, striving to quickly become an excellent member of your team and will apply my skill set where it's possible to improve the process.

#### **Projects**

#### Building App: Snake Game (Python, Turtle Library) 8/2023

Designed, programmed, and executed a captivating Snake game leveraging Python and the Turtle graphics library.

Incorporated the principles of object-oriented programming by inheriting from the Turtle class for the creation of game objects.

Developed intuitive user controls, enabling players to seamlessly navigate the snake through the game environment.

Engineered a dynamic food generation system using random coordinates, enhancing gameplay unpredictability.

Demonstrated advanced coding skills through the implementation of collision detection mechanisms and scoring algorithms.

### Project: Predicting Discharge type from Hospital for Diabetes Patients (Python, Machine Learning) 2/2023

Collaborated in a team to develop a machine learning model for predicting the discharge type of diabetes patients in hospitals.

utilized a dataset containing over 50 features, including admission type, time in the hospital, and insulin levels, from 130 hospitals over a 10-year period. Employed classification methods such as Logistic Regression, Multi-class Classification, Random Forest, multi-layer Perceptron,Svm model and Gradient Boosting.

Conducted a grid search to optimize the model's performance by tuning hyperparameters.

Applied error metrics such as F1 score to evaluate the models' performance. Collaborated with team members to analyze the dataset and draw insights from the results.

## Building App: Birds of a Feather (BoF) (Java, Android app)2022 - Classmate Connection App(CSE 110)

Create BoF, a mobile app that facilitates connections among students who have taken previous classes together, promoting collaboration and social interaction. Developed the Android version using Java, with Bluetooth integration to enable seamless class information exchange.

**Project: Data Compression 2021 (C++, Data Structure)**- Implemented Huffman coding algorithm for lossless data compression.

Developed a text compression app that analyzes letter frequencies, constructs a Huffman tree, and reduces ASCII value representation from 8 bytes to 4 bytes. Achieved efficient compression by utilizing optimal prefix codes generated from the Huffman tree.

Reduced storage requirements while preserving data integrity.

Gained insights into data compression techniques, coding algorithms, and data structures.