GARY LIANG
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EDUCATION

Bachelor of Science in Computer Science. GPA: 3.53

- Graduated: Spring 2018
- California State Polytechnic University, Pomona, California
- College of Science, Dean's List 2014-2017

Courses Included:

Artificial Intelligence	Database Systems
Java/C++ Programming	Computer Architecture
Software Engineering	Data Structures
Graphical User Interfaces	Operating Systems

EXPERIENCE

HackPoly Hackathon 2017, Participant

- Attended hosted hackathon at California State Polytechnic University
- Produced an attack detection program focusing on U2R attacks (User to Root) using Java AWT, Swing, and MySQL libraries for storing logs into database
- Created Linux system log files as test cases for program to store in database tables.
- Created GUI log table window and used SQL Queries to grab appropriate data from connected database to display these logs to table window from stored database tables.

TECHNICAL PROJECTS

Artificial Intelligence Application: Connect Four Game (Fall 2017)

- Developed single-player Connect Four executable program with an opponent AI bot.
- Opponent AI bot implemented using alpha-beta pruning search algorithm based on current board with complex heuristic function that determines which move is more optimal for bot while minimizing player's moves.
- Moves calculated within 30 seconds while expanding game-tree to produce best possible piece placement.
- Possible placements in game board with heuristic cost stored and sorted using Priority Queue data structure to observe game boards with better heuristic first.

Android Application: Concentration Game (Winter 2017)

- Developed application for Android OS using Android Studio IDE with Java
- Implemented game logic and writing high scores into text file for various difficulties using Fragments.
- Used Nexus 5 emulator to debug and run application.

Graphical User Interface Games (Summer 2016)

- Created various games such as Hangman, Color Matching, and Sudoku.
- Designed using Java AWT and Swing with NetBeans IDE.
- Used CardLayout Manager API to organize and switch JPanels to display another JPanel when certain action events occur in game.
- Created custom DefaultTableCellRenderer and DefaultTableModel sub-classes to override parent-classes and set attributes from sub-classes to JTable class to render a Sudoku table.

LANGUAGES AND TECHNOLOGIES

- **Languages:** Java, C++, JavaScript, HTML, CSS, SQL.
- **Software andTechnologies:** Visual Studio, Eclipse, Android Studio, NetBeans, Git, MySQL, JetBrains WebStorm.