Nigel Fang

Mobile: (626) 991 - 0359
nigel.fang00@gmail.com

EDUCATION: **California State Polytechnic University Pomona**
Bachelor of Science in Computer Science
GPA 3.45/4.0   Expected graduation date: May 2023

Yonsei University, Seoul Korea
Study Abroad for Fall 2022

RELEVANT COURSES:

- Data Structures
- Design and Analysis of Algorithms
- Linear Algebra
- Deep Learning
- Software Engineering
- Data Mining
- Object Oriented Programming C++/Java
- Python for Programmers
- Computer Vision

PROJECTS:

CPP Enrollment System Program   **Team Member**
- Worked in a group of 5 programmers to mimic the enrollment system at Cal Poly Pomona for unit testing
- Created a layer class to allow data to be transferred from a local database to the GUI
- Written in Python, SQLite, JSON

Weightlifting   **Creator**
- Desktop application that takes user inputs and calculates the target goal for strength in Olympic Weightlifting based on Russian Standards from the 1960s
- Uses SQL for database storage, JavaSwing for UI management, and built with Gradle
- Written in Java and SQL

PPG Neural Network   **Creator**
- Deep Learning project that takes PPG readings from datasets and camera footage and trains a RNN model to predict data
- Uses PyTorch libraries to build the model, however hyperparameters and layers were set and created by hand
- Manages to obtain above 98% validation rate on the test set and above 90% on live demonstrations
- Written in Python and Matlab

Picture Stitching   **Creator**
- Takes two images, computes the homography given at least 8 pairs of coordinates and stitches the pictures together
- Built from scratch, but uses ideas from Seong Jae Hwang
- Written in Matlab

WORK EXPERIENCE:

Private tutor
- Tutored children in grades K-8 in a variety of subjects, including math, reading, and writing.
- Created customized lesson plans to meet the individual needs of each student and provided ongoing support to ensure academic success.
- Utilized innovative teaching techniques and technologies to engage and motivate learners.
- Maintained regular communication with parents and guardians to provide updates on student progress."

TECHNICAL / NON-TECHNICAL SKILLS:
- Intermediate in Mandarin
- Elementary in Japanese and Korean
- Java, Python, C++, MATLAB, SQL, HTML/CSS
- Git, Linux, Gradle

HOBBIES / INTERESTS:
- Keyboard building
- Rock Climbing
- Olympic Weightlifting
- Video games