

Nigel Fang

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<https://nigelfang.github.io>

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

WORK EXPERIENCE:

Freelance Web Developer

June 2020 - Present

- Experience in building custom business and e-commerce websites using HTML, CSS, and JavaScript
- Delivered high-quality, user-friendly, and visually appealing websites that meet clients' specific needs and requirements.
- Experience and understanding of optimizing website performance, security, and user experience.
- Excellent communication and project management skills, able to work effectively with clients to understand their goals and provide timely and effect solutions.

PROJECTS:

CPP Enrollment System Program

Team Member

- Mimics the enrollment system at Cal Poly Pomona and can saves individual users
- Developed the data pipeline that transferred information from the local database to the GUI
- Written in **Python**, **SQLite**, **JSON**

Weightlifting

Individual Project

- Desktop application that takes user inputs and calculates the target goal for strength in Olympic Weightlifting
- Uses SQL for database storage, JavaSwing for UI management, and built with Gradle
- Written in **Java** and **SQL**

Photoplethysmography 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
- Scores above 98% validation rate on the test set and above 90% on live demonstrations
- Written in **Python** and **Matlab**

Picture Stitching

Individual Project

- Takes two images, computes the homography given at least 8 pairs of coordinates and stitches the pictures together
- Uses key point recognition and computes the projective transformation and applies a warping filter to the images
- Written in **Matlab**

Interactable Task List

Individual Project

- Allows users to move tasks between different stages of task management
- Uses ReactJS framework for front end GUI and PostgreSQL for data management
- Written in **JavaScript**, **Typescript**, **HTML**, **CSS**, **SQL**

TECHNICAL / NON-TECHNICAL SKILLS:

- Java, Python, C++, C, MATLAB, SQL, HTML/CSS
- Git, Linux, Gradle

RELEVANT COURSES:

- | | | |
|-------------------------------------|------------------------|--|
| • Data Structures | • Deep Learning | • Object Oriented Programming C++/Java |
| • Design and Analysis of Algorithms | • Software Engineering | • Web Development and Application |
| • Data Mining | • Computer Vision | |

Student Organizations:

- **Bronco Lifting – National Championship Competitor, Founding Member**

NON-TECHNICAL SKILLS:

- Intermediate in Mandarin
- Elementary in Japanese and Korean

HOBBIES / INTERESTS:

- Keyboard building
- Rock Climbing
- Olympic Weightlifting
- Video games