### YANGXIAOGE ZHANG

San Bruno, CA 94066

## 818-629-3727 | Shelgerz@gmail.com

# www.linkedin.com/in/shelger-zhang | https://github.com/Shelger

#### **EDUCATION**

University of San FranciscoSan Francisco, CAMaster of Computer ScienceGPA: 4.0/4.0September.2021-present

**Pepperdine Graziadio Business School** 

Malibu, CA

Master of Science in Global Business GPA: 3.687/4.0

December. 2020

**Sichuan University** 

Chengdu, Sichuan

Bachelor of Engineering in Machine Design & Manufacturing and Automatic

June 2018

- Leadership: Minister of Propaganda Department in the Alumni Association, Study Secretary
- Awards/Honors: Individual Scholarship, Third place of Innovation Cup for college students, The fifth place of 100 meters in the school sports meeting

#### **Relevant Coursework**

- Data Structure and Algorithms
- Intro to Al
- Modern System Programming
- Object-Oriented Programming
- Intro to Database System
- Discrete Mathematics
- C++ Programming
- Fundamentals of Website Development
- Calculus

#### **Research in Machine Learning and Programs**

## "Natural Language Processing NLP"

March 2022

Graduate student with Prof. Chris Brooks

- Used Natural Language Toolkit (NLTK) library functions, such as freqDist, to realize k\_means function calculating Euclidean distance and clustering texts
- Separated training files into different categories with Naïve Bayes algorithm
- Tested on remaining files and modified accuracy by repeating steps above

"8-Puzzle Game" February 2022

Graduate student with Prof. Chris Brooks

- Designed a class in Python for states of table, a 2-D array
- Added functions, is Goal and getNextStates, returning a list of children for current state
- Used algorithms for simulation, such as Breadth-First Search, Depth-First Search, Iterative Deepening Search and Heuristics Search (A\*)

"Music Library" November-December 2021

Graduate student with Prof. Chris Brooks

- Read data from MusicBrainz.com into SQL
- Created song, artist, album classes to store and modify data, libraries and playlist to realize adding, deleting and classifying songs
- Used Swing in Java to design Graphic User Interface (GUI), making data visible and enabling users to modify playlists

## "Capacity prediction of semiconductor industry"

March – June 2018

Graduation thesis with Prof. Jingmin Lee

- Randomly chose part of documents from production report for learning, leaving others as testing data
- Focused on products CPT, PPT, IBX, then used control variates and partial derivatives to choose the prior parameters, Quantity Per Shift (QPS), Work In Process (WIP), DOWN, and MIX
- Created model by Back Propagation Neural Network with MATLAB analyzing data
- Input left data into model and calculated difference between real and predicted capacity, changed weights of parameters and repeat processes until difference under 1%

#### Skills

• Languages:

Proficient in Java, Python, HTML/CSS Familiar with C++, SQL, MATLAB

Technologies:

Node.js, AutoCAD, SolidWorks, PROE

### **EXPERIENCE**

### **Proshipping Group Corp**

California, United States

Proshipping Group Corp is an international logistics service provider, including logistics and distribution, international trade management. Customs brokerage.

# Shipping/Trade Coordinator

May - July 2020

- **Simulation:** Constructed models about future recovery for shipping companies, such as regressions in Microsoft Excel, and future value estimation
- **Data Analysis:** Checked financial statements via database, drew conclusion from models, more than 20% losses to international shipping
- Coordination: Worked out programmes for colleagues to enhance existing procedures, and ensured
  efficient coordination and internal communication, reducing working hours from 45 to 35 to enhance
  efficiency
- Results: Forecasted recovery, expanding more than 3.0% in 2021

#### **Shanghai Future Exchange**

Shanghai, China

Shanghai Future Exchange organizes futures trading approved by CSRC. Nowadays, SHFE has 14 futures contracts, 1,202 billion transactions one year, and more than 1.33 million customers around world.

Research Assistant August – October 2018

- Microsoft Excel: Gathered information of stainless steel markets in company's database for estimate, such as sales of spot goods and professional evaluations
- Data Analysis: Built a model to estimate results of release by using MATLAB to train data in spreadsheet, rebuilt models until received a reliable expectation
- **Results:** Considered stainless steel futures had never appeared around world, processed a NN Model, and worked out 90% chance to create a positive market