# Shikan (Steve) Chen

shc040@ucsd.edu | (518) 505-0694 | linkedin.com/in/shikan-chen

# **EDUCATION**

University of California San Diego Sep, 2021 - Jun, 2023

Major: Computer Science, M.S.

Rensselaer Polytechnic Institute Sep, 2017 - Dec, 2020

Major: Computer Science, B.S.

# **EXPERIENCE**

## Software Development Engineer Intern at Mitchell International

Jun, 2022 - Oct, 2022

- Worked with team members to understand the software development process and best practices
- Created and implemented a microservice for Intelligent Review Profile feature in Workcenter. This feature assists reviewers of auto insurance carriers to estimate the cost of repair/overhaul of vehicles

# Computer Vision Algorithm Engineer Intern at Surreal

Apr, 2021 - Jul, 2021

- Conducted the implementation of InfinityGAN for infinite-pixel image synthesis as future features of company's visual storytelling development tools
- Assisted in a project for increasing the accuracy of face recognition from 95% to 98% with face accessories based on ArcFace by removing parts of face accessories without losing too much information of the image during preprocessing
- Helped with the back end team for fast data filtering and transmission inference of InfinityGAN features

# Software Development Engineer Intern at ZDLink PLM Corporation

Sep, 2019 - Jan, 2020

- Organized client data sets and created sorting functions for multiple different data structures
- Helped the team debug multiple modules of the platform by adding dummy data and reproducing errors
- Collaborated with the marketing team for client end data visualization functions to help clients better interpret the collected data

# **PROJECT**

#### NLP Research (Lang & Cog Artif Intell Research): COMETH (DARPA)

- Worked on data preprocessing, including named entity filtering, document lemmatization, and digits filtering
- Conducted the training of LDA models for topic/information extraction and data visualization
- Helped develop a metric using Kurtosis to calculate the purity of topics extracted from LDA models
- Fine-tuned the BERT model embedding with the corpus of COMETH dataset, trained it to produce embedding vectors with certain keywords, and conducted Hypothesis Testing for Null Hypothesis using T-tests of the embedding vectors

#### **Smart Contracts (Blockchain): SCALES**

- Conceptualized the structure of a useful application of smart contracts for the transmission of classified medical data
- Worked on the design and implementation of a decentralized healthcare system module using IBM Hyperledger Fabric improving the accessibility of information between different hospitals
- Developed protocols that allows doctors and patients to access medical images with permission integrity
- Collaborated with other peer researchers for a less space-intensive storing approach for medical image protocols

## IBM Watson AI Research (Conversational AI): Development of Multi-modal Dialogue

- Used Watson AI tools to create, debug, and test a multi-modal dialogue to power AI agents to teach a foreign language in an immersive environment
- Assisted the team in integrating this dialogue with the rest of the project and helped with debugging so that the system has the ability to better motivate the user with absorbing the taught language
- Worked with the lead team for reports of progress and performance of the research

# **SKILLS**

**Programming Language:** Python, Java, SQL, HTML, JavaScript, CSS

**Framework & Tools:** Spring & Spring Boot, Flask, PyTorch, Tensorflow, JQuery, Bootstrap, Jupyter Notebook, Git. Docker

**Others:** Data Visualization, Critical Thinking and Problem Solving, Open-mindedness and Adaptability, Teamwork and Collaboration, Project Management Leadership

Language: Fluent in English and Mandarin (native speaker)

Database & ORM: MySQL, SQLAlchemy &

Flask-SQLAlchemy