De Ren

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EDUCATION

University of California, Irvine

Irvine, CA Sep 2019- present

B.S. in Information and Computer Science

• GPA: 3.4/4.0

• Related Coursework: Machine learning/Data Mining/Graph Algorithms/Intro to Optimization/Intro to Artifcl Intel/Embedded software/Formal languages and Automata theory/Programming course(python,C/C++,mips)

RESEARCH EXPERIENCE

Research Assistant, UCI

Sep 2022- present

• Assist in doing research about Graph theory applied to network database engines and biological network alignment. Help Visualize the matched network.

Lab Tutor, UCI Sep 2022- present

• Lab tutor for Python course in the university

Participant, Summer 2022 Privacy and IoT Research Exploration Workshop 2, UCI Jun 2022-July 2022

- Learned about cutting-edge research on privacy and security
- Hands-on experience with raspberry-Pi, tinyML, networking and network traffic collection and analysis, IoT in general and voice assistants in particular.
- A deeper exploration of voice assistants. Participants built their own voice-assistant from scratch, and became familiar with the privacy and targeting risks posed by commercial voice assistants.

INTERNSHIP EXPERIENCE

Shenzhen Altitude Drives Technology Co., Ltd

Shenzhen, China

Test Engineer Assistant

Jun 2021- Aug 2021

• Completed device sample testing and evaluation and testing of new machines

Shenzhen Altitude Electrical Techniques Co.,Lt

Shenzhen, China

Software Engineer Assistant

Jun 2020- Sep 2020

- Got familiar with Modbus protocol
- Independently realized the AD300 series AC driver's Rs485 Modbus communication using C language

Neusoft
Intern
Beijing, China
Aug 2018- Sep 2019

• Responsible for programming and website testing etc. In Civil Aviation Department

PROJECT

Python selenium program

- program that detects open spot in course and auto login to register.
- a web crawler that traverses the given website and collects wanted information
- programs that do repeat work like filling out online surveys (multi-choice only)

AI program

- Use python to create a graphical 2048 game and a AI agent that play the game using monte carlo tree search.
- Program that solve Travelling Salesman using BnB backtracking DFS and Stochastic Local Search in python/C++/java.

ML

- Basic experience using mnist dataset and iris dataset
- Implement and analyze 4 machine learning algorithms(FNN,KNN,random forest,logistic)'s preformance with PyTorch on Fashion Mnist.(Group project)

Optimization

• Code three different optimization methods (Penalty methods, Sequential least squares programming, Trust constraints) in Julia,run it on 12 years stock data(20 stocks), find the portfolio that balancing between risk and return. (Mean-variance portfolio optimization)

Personal Website

- www.deren.life
- Learn html/css/js by myself and build a personal website on my own. Recently started, still updating.

MISCELLANEOUS

- Language: Mandarin Chinese (native), English (fluent), Germany (conversational)
- IT skills: Python, C++/C, Julia, MIPS, html/css/js
- Interests: Bartending, football, Call of Duty, watching American TV shows

References available upon request