VIVIAN WONG

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EDUCATION

Stanford University   Stanford, California

Master of Science in Civil Engineering, December 2018   GPA: 3.911/4.0

University of Illinois at Urbana-Champaign   Urbana, Illinois
Bachelor of Science in Civil Engineering, May 2017
Engineering James Scholar
GRE: Math 170/170, Verbal 162/170 (91st Percentile)
Selected Coursework:
- Programming Abstractions, Deep Learning
- Probabilistic Models in Civil Engineering, Structural Dynamics, Mechanics and Finite Elements

CONFERENCE PRESENTATIONS

Wong, V. W. H., (2016). "Development of a Control System and User Interface for the Quanser Shake Table II," Poster presentation, Undergraduate Research Symposium 2016, 2016-04-21, Urbana, Illinois.

WORK EXPERIENCE

Research Intern

City Brain Project, Alibaba Cloud, Hangzhou, China - July 2018 - September 2018

- Developed a traffic signal control algorithm using deep reinforcement learning
- Self-taught necessary background information of traffic engineering as well as reinforcement learning
- Implemented various Q-learning extensions in the traffic signal control algorithm in order to improve performance
- Trained traffic light agent on a single simulated intersection

Undergraduate Research Assistant

Smart Structures Technology Laboratory, Urbana, Illinois — September 2015 - May 2017

- Developed software programs in NI LabVIEW and implemented NI CompactRio data acquisition system to collect and process signal acquired from the movement of a Quanser Shake Table II
- Developed a PID control system and graphical user interface for calibrating and controlling the shake table using MATLAB Simulink and NI LabVIEW
- Performed small-scale vibration testing on shake tables and presented experimental results in a research conference

Engineering Learning Assistant

Dept. of Civil & Environmental Engineering, UIUC - May 2016 - May 2017

- Co-taught a class that mentored first-year civil engineering students on academic and professional development
- Worked with Professor Valeri Werpetinski to advise and supervise student projects on urban infrastructure

Engineering IT Student Consultant

University of Illinois at Urbana-Champaign IT Department, Urbana, Illinois — January 2015 - May 2015

- Resolved network difficulties and answered questions as a customer service representative
- Troubleshooted for Linux and Windows computers and enhanced computer skills
- Communicated with computer lab users through email, telephone, and face-to-face

PROJECTS

Digital Twinning of Wheelchair Riders to Improve Indoor Accessibility

Stanford University, Stanford, California – January 2018 - March 2018

- As a part of a research project, developed Python programs to simulate movements of a digital wheelchair and its rider in a 3D virtual environment

Uni3000 - an Android game for learning vocabularies

September 2018 - Present

- Created a SIM game in Android Studio that allows users to play while expanding their vocabularies

SKILLS

Programming/Scripting Languages: [Proficient] MATLAB, LabVIEW; [Familiar] Python, C, Java, C++; [Basic] Javascript; Git

Design Software: [Proficient] Photoshop, Illustrator, AutoCAD, Revit, Rhino, SketchUp

Languages: [Fluent] English, Mandarin, Cantonese; [Beginner] French

AWARDS & RECOGNITION

LabVIEW Certified Associate Developer	2016
Earle J. Wheeler Scholarship	2016
Fred S. Bailey International Service Travel Scholarship for Cause-Driven Leaders	2016
International Engineering Fellowship	2016
Wayne C. Teng Scholarship	2015
Dean's List/GPA Ranks in Upper 20% of College	2014-2015