Zhaoliang ZHENG

+1-(858)228-7972 | zhz503@eng.ucsd.edu

Box 1133, 3869 Palmilla St., San Diego, CA 92092, U.S.A.

EDUCATION BACKGROUND

University of California, San Diego *September 2017-June 2019*
MS in Mechanical and Aerospace Engineering, expected June 2019 Cumulative GPA: 3.71/4.00
Emphasis：Systems, Design and Controls
ECE-related courses: ECE 228:ML for Physical Applications, MAE 247:Coop Control/Multi-Agent System

Dalian University of Technology (DUT) *September 2013 –June 2017*
BE in Processing Equipment and Control Engineering Cumulative GPA: 3.50/4.00

RESEARCH EXPERIENCE

Bio-inspired robot program (projected-based course) *March 2018-June 2018*

- Programmed in python, and simulated the motion process for control endpoints of robots' legs
- Designed the mechanical structures for the robot, and assembled the robot
- Made adjustments and improvements to resolve the structural defects for the robot
- Conducted motion control programming for the robot

Human Frontier program *March 2018-June 2018*

- Build 3D models for scanned pictures with Agisoft PhotoScan
- Prepared manual for end-users on using Agisoft PhotoScan to build 3D model for stumps
- Tested the influences of different imaging qualities on 3D modeling
- Inspired by GPS and found an innovative and effective theory to calculate the minimum scanned pictures required for 3D modeling

Project-Based Machine Learning Research Program—Fake News Detection
Team Leader *March 2018-April 2018*

- Conducted hyper-tuning to choose a set of optimal hyperparameters for the model of the classifier
- Processed news through integrating multiple Natural Language Processing methods, including text：doc2vec+title: word2vec,extended doc2vec, and TF-IDF+doc2vec
- Prepared the whole pipeline to process and classify original material of news

Ships Identification in Satellite Images (Machine learning project-based course)
Team Leader *March 2018-April 2018*

- Processed image data through multiple classifiers, including: XGBoost, random forest, Convolutional Neural Network with Stochastic Gradient Descent
- Compared different methods and result discussion
- Poster design and 60 percent of paper writing

Patent

Multifunctional Doula Chair for pregnant woman (designed and modeled with Inventor 3D)
To be submitted for approval of State Intellectual Property Office of the P.R.C in 07/28/2018

Thesis

Position and attitude control of ROV based on dynamic positioning system
- Has been published in Dalian university of technology

BTT/STT Missile Switching Control Design
- To be submitted to EI International Conference in 10/2018

HONORS AND AWARDS

Outstanding Undergraduate Thesis, DUT, (3% of all the DUT students) *June 2017*
Academic Excellence Scholarship 2015-2016 (15% of all the DUT students) *October 2016*
First Prize, 2016 Mathematical Contest in Modeling, (5% of all the Contestants) *February 2016*
Scientific Innovation Scholarship 2014-2015 (4% of all the DUT students) *October 2015*

SKILLS AND QUALFICATIONS

- **Computer**—C Language(5 years), python, Matlab(3 years), Simulink(3 years), CAD(5 years), Inventor 3D (5 years) , Solidworks (2 years) , LaTeX, Agisoft photoscan, and Max Misher
- **Qualifications**—CLAD(Certified LabVIEW Associate Developer)