

WILL CHEN

willchenyh.github.io

Looking for internship opportunities in data science and machine learning

EDUCATION

06/2017	B.S. Electrical Engineering	University of California, San Diego	GPA: 3.5/4.0
06/2019	M.S. Machine Learning and Data Science	University of California, San Diego	GPA: 3.9/4.0

RELEVANT COURSES

- | | | |
|------------------------|------------------|---------------------------------|
| • Neural Networks | • Linear Algebra | • Data Structures |
| • Statistical Learning | • Probability | • Software Tools and Techniques |

SKILLS/QUALIFICATIONS

- Proficient in Python, MATLAB
- Experience with Keras, Caffe, TensorFlow, SQL, OpenCV, Linux
- Data science tools: Scikit-learn, Pandas, NumPy, Matplotlib, Bokeh

EXPERIENCES

- Machine Learning Intern**, AV Lab, San Diego (07/17 – 09/17)
- Researched and learned various unsupervised clustering techniques
 - Applied clustering methods and Recurrent Neural Networks on astrophysical data
- Research Assistant**, Statistical Visual Computing Lab, UCSD (01/17 – 09/17)
- Collected over 12,000 plankton images both from ocean cameras and in the lab
 - Classified plankton images using Convolutional Neural Networks on taxonomical levels and achieved above 90% accuracy
 - Fine-tuned AlexNet, with pre-trained ImageNet weights, on Caffe platform for classification tasks
 - Extracted latent variables from neural networks and used SVM for classification
 - Created a plankton pose predictor by modifying AlexNet with regression layers
- Teaching Assistant**, Electrical and Computer Engineering Department, UCSD (09/16 – 12/17)
- Wrote detailed instructional materials on introductory Python and computer vision programs
 - Led class discussions on deep learning applications in computer vision

PROJECTS

- Face Recognition System Prototype** (06/17)
- Trained a VGG16 network with transfer learning in Keras using online and personal face data
 - Established a system to autonomously detect faces using OpenCV, and fetch and send data between a Raspberry Pi and remote GPU
- Text Sentiment Analysis** (01/17)
- Built a classifier with 94% accuracy on positive and negative Yelp reviews, using over 70,000 entries
 - Applied techniques including stemming, lemmatization, Bag of Words, and Recurrent Neural Networks with word embedding for classification.
 - Utilized NLTK and scikit-learn packages in Python
- Visualization on Flight Delays** (10/17)
- Cleaned, organized and visualized flight delay data from Department of Transportation website
- House Price Prediction** (12/17)
- Processed data, and applied linear, tree-based and stacked models for prediction

LEADERSHIP

- Vice President External**, Institute of Electrical and Electronic Engineers (IEEE), UCSD (05/16 – 05/17)
- Led weekly internal meetings, provided oversight to officers, helped managing responsibilities including sponsorship applications, event logistics, and website maintenance, resulting in the organization's effective operation

