

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

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

SKILLS/QUALIFICATIONS

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- 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 and event logistics, resulting in the organization's effective operation