# **HAO WANG**

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### **EDUCATION**

Georgia Institute of Technology, Atlanta

August 2019 - Present

September 2015 - June 2019

Master in Electrical and Computer Engineering

Tianjin University, Tianjin China Bachelor of Engineering, Automation.

Overall GPA: 3.58(on a 4.0 scale)

### **PROJECTS**

## Intelligent Garbage Identification and Sorting — Tianjin University

2018

The project aims at designing a system to sort garbage by computer vision. As a classification problem, a unique garbage image data which contain thousands of labeled image set was built and a CNN is implemented.

Complex Text Detection on Garbage Image Data Set — Tianjin University

2019

Implement and improve Pixel-Link CNN which combines semantic segmentation and object detection on garbage image text data set. Prepare the data, improved Pixel-Link, test network and hyper-parameter tuning.

# Combination of Image Compression and Contrast Enhancement in Aerospace Application — Georgia Institute of Technology 2019

Put forward a hybrid approach to improve the visual quality of images from satellites. Three methods in image processing are implemented, improved and combined in this approach. DWT-SVD, combined Huffman coding and blocking effect reduction were implemented to improve traditional methods.

# Estimation, Comparison and Analysis of Yellow Taxi in NYC — Georgia Institute of Technology 2019

Around 8 gigabyte data was used to train a machine learning model to generate the taxi fare in NYC by pick up location and destination. An interactive user web page was built which can show the map of NYC by Google map and the price could be compute back-end. Several experiments were made to analysis and compare the price of Lyft and yellow taxi.

### TECHNICAL SKILLS

Programming	C++, Python, JavaScript, Java, C, Assembly language on microprocessors
Theories	Image processing, Machine learning, Control systems, Advanced mathematics
${\bf Software \& API}$	Matlab, Tableau, Gephi, Unity, OpenGL, Latex, Hadoop

### **SCHOLARSHIPS**

Merit student scholarships(top 15% in department)	2016
Merit student scholarships(top 15% in department)	2017
Merit student scholarships(top 15% in department)	2018