YU ZENG

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OBJECTIVE

To obtain a hands-on position developing and optimizing computer vision projects

EDUCATION

Stanford University, Stanford, CA — expected 2020
Electrical Engineering · Master of Science — Current GPA: 4.0/4.0

Shenzhen University, Shenzhen, China — 09/14 - 06/18
Biomedical Engineering · Bachelor of Engineering — Overall GPA: 3.87/4.0

EXPERIENCE

Computer Vision Algorithm Engineer Intern — 12/17 - 05/18
Tencent, Shanghai, China

· Adopted human pose relating techniques to vehicles on main deep learning frameworks
· Submitted a patent about fusing different descriptors of vehicles for data augmentation
· Successfully re-produce pruned detection models like SSD/RefineDet between Caffe and TensorFlow
· Learned the pipeline from acquiring data to training models with iterative optimization in industry

TECHNICAL STRENGTHS

Computer Languages	Python, C/C++, MATLAB
Software & Tools	PyTorch, TensorFlow, Jupyter, HTML, Three.js, OpenGL

RELEVANT COURSEWORK

Computer Vision	Image Processing	Computer Graphics
Machine Learning	Convex Optimization	Virtual Reality

COURSE PROJECTS

Kung Fu Master — 03/19 - 06/19

· Built a VR game which aims to help people learn (play) Kung Fu based on Unity3D
· Developed a guided learning system including incentive score feedback and clear illustrations
· Used quaternion to ensure objects (tutor, cubes, balls) within sight when we rotated around

Landmark Recognition Challenge — 04/19 - 06/19

· Investigated the large-scale classification problem consisted of 5 million images with heavily imbalanced landmarks (hot/cold spots) spanning 200k classes
· Done hyper-parameter / model selection on the 2k toy dataset then deployed on the selected 18k dataset
· Tried tricks like attention mechanism, stage finetune, and focal loss on ResNet101 and SE-ResNet50
· Made an ensemble of best models with DeLF filter which beats 76% teams in Kaggle

Food Recommendation System — 09/18 - 12/18

· Worked on a three-person team to develop algorithms on recommending Chinese dishes intelligently
· Originally crawled recipes from a public website by efficient multithreading process on cloud servers
· Designed and programmed several ideas experimentally via positive and effective communication