VictorLi(李源源)

Contact

- Email: yuanyuan.li85@gmail.com
- Website: https://github.com/yuanyuanli85
- Phone: (86) 159-2158-9231
- Address: 788 JinPin Road
- City: Shanghai China

Profiles

- GitHub - yuanyuanli85
- Kaggle (Competitions Expert) - victorli

Summary

Victor is a software engineer, quicker learner, passionate about using deep learning to create something interesting!

Work

Machine Learning Engineer, Intel 2016-06-01 - Present

- Focus on deep learning algorithm development on computer vision tasks.
- Led an innovation project "Personal Fitness Coach Powered by AI" incubated by China I2R
- Key developer for chip defects inspection in manufacture.

Senior Graphics Software Engineer, Intel 2011-04-01 - 2016-06-01

- Runtime and User Mode Graphics driver development on multiple mainstream OSes (Linux and Windows)

- Optimized resource management and cross-layer code refactoring
- Cut off 80% validation time by using virtualization technology Worked as a GPGPU (MDF) SDK runtime developer for Intel integrated GPU (from SandyBridge to SkyLake)
- Project open-source link C for Media

Skills

- Master in Computer Vision (Convolutional Neural Network, Human Pose Estimation, Product Defects Detection in Manufacture)
- Master in Graphics Runtime Development (Resource Management, Knowledge on Graphics Subsystem on Windows(DX9/DX11), Graphics software stack on Linux (Libva))
- Master in Programing Languages and Tools (C/C++, Python, Keras, Caffe)

Awards

- Intel ZiZhu Innovation Star 2018

Project

FlexPose: Real-time 2D Human Pose Estimation on CPU 2017-06-01 - 2018-05-01

- Multiple Person 2D Human pose estimation. CNN Network design and optimization.
- Project Introduction Article Get Your AI Fitness Coach
- Selected and incubated by Intel [China I2R Batch 4 Program]
- Numbers： ~4x inference acceleration: depth-wise/separable conv, layer fusion, multiple task learning, clCaffe, fp16, inference engine，30fps at i7-6700HQ

Chip Defects Inspection via CNN 2017-03-01 - 2017-06-01

- Factory faced chip escape with defects on solder-resistor and land pad.

- Traditional CV method can't meet Factory's requirement (false negative and false positive)
- Designed U-shape-like network to do segmentation which outperform detection network.
- Designed image synthesis algorithm to solve limited training sample issue.

Competitions

TianChi FashionAI Cloth KeyPoints Detection 2018

- Competition detect the keypoints of cloth to represent fashion. It contains 5 categories: skirt, blouse, dress, trousers and outwear.
- Keywords: Keras, U-net, GlobalNet+RefineNet, Multiple stack, On line hard negative mining.
- Rank Top2%, 45/2321 at first round competition.

Kaggle Ultrasound Never Segmentation 2016

- Competition try to identify nerve structures in ultrasound images
- Keras, U-net, Dice coefficient loss, Transformation for data augmentation.
- Rank Top5%, 55/923

Kaggle State Farm Distracted Driver Detection 2016

- Competition wants to use CNN to classify driver's behavior, such as texting, drinking, reaching behind during driving.
- Caffe, Fine-tuning from ResNet, Driver location normalization, Data augmentation. Dropout to overcome overfitting.
- Rank Top10%, 132/1440

Education

ZheJiang University - Master in Communication Engineering

- 2011-03-01 - 2008-06-01

- Wireless Sensor Network
- MAC(Media Access Control) Protocol

ZheJiang University - Bachelor in Electronic Information Engineering

- 2002-08-01 - 2006-06-01
- Network
- C Programing Language

Patents

- Facilitating Efficient Communication and Data Processing in Heterogeneous Computing Environment in a Heterogeneous Computing Environment
- Event-driven Framework for GPU Programing
- Graphics Processing Unit Operation
- GPU-CPU TWO-PATH Memory Copy
- Method and Apparatus to Improve Shared Memory Efficiency
- Apparatus and Method to Improve Memory Access Performance Between Shared Local Memory and System Global Memory

Languages

- Fluent in English
- Native Speaker in Mandarin