Xiao Ma

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EDUCATION

Shanghai Jiao Tong University (SJTU), Shanghai   2013 - 2017
Bachelor of Science in COMPUTER SCIENCE
GPA : 3.67/4.3 (Core Curriculum), 3.65/4.3 (Overall)

AWARDS

Academic Excellence Scholarship   2014
Honorable Mention of Mathematical Contest In Modeling   2016

WORK EXPERIENCES

Internship at **Intel** Asia Pacific R & D Center(WTO Group)   2016 - present

RESEARCH EXPERIENCES

Forecasting Sparse Time Series in Crowd-Sensing   2014 - present
Supervised by Professor Fan Wu   *Advanced Network Lab*
· **Independent Study.** Designing a system model, aming to solve the sparsity of data collected in Crowd-Sensing, quantifying the missing data and trustworthiness in time series, and finding the latent correlation within and among time series to implement the missing data imputation integrated with trustworthinss learning to support further forecasting. This method can offer a higher accuracy of imputation than the state-of-art method in crowd-sensing.

Hot Topics Prediction in Social Networks   2015 - present
Supervised by Professor Xiaofeng Gao   *Advanced Network Lab*
· **Independent Study.** For the huge amout of data of social networks and the correlation within topics, using machine learning, define $Seed - Indexing$ to find the latent correlations among topics, and designed an inovative algorithm founded on Matrix Factorization based Collaborative Filter specialized for the characteristic of social networks, which is efficient and can provide high accuracy.

Segmentation of Abdominal Adipose Tissues via Deep Learning   2015-2015
Supervised by Professor Bin Sheng   *Lab for Digital Media and Data Reconstruction*
· **Leader of a group of 3 people.** Designing a deep learning algorithm to seperate visceral adipose tissues and subcutaneous adipose tissues and an user interface using MATLAB, combining with CUDA based GPU acceleration, then volume rendering the medical images with OpenGL built on MFC. The difference between the result of our algorithm and the manual seperation is at most 5%.

NOTABLE PROJECTS

Smart Car Controling via Android Mobile Phones
Programming on two Android phones, one for controling and data collection, the other for picturing on the car. We use socket to send messages and video between two smart phones, and use bluetooth to communicate between the phone and the car.
Abilities: Android programming, Bluetooth communication, Socket communication.

Smart Car Controling via Computer
Programming on computer and smart car, processing images captured by camera with OpenCV, and designing an algorithm to automatically determine the route of the car, and the latency is at most 5ms.
Abilities: Image Processing with OpenCV, Bluetooth communication, MCU development.

Simple CPU and Memory Replacement policy design
Developing a simple CPU in Linux and designing my own memory replacement policy, the performance of which is almost 20 times better than traditional policies, such as LRU and LFU.
Abilities: Basic understanding of CPU schedualing and programming with Linux API.

SKILLS

Programming:	(Proficient) MATLAB, C/C++, Python, LaTeX
	(Familiar) Java, JavaScript, HTML
Platform:	Windows, Linux, Android, Embedded System
Language:	Mandarin (Native), English (Fluent, TOEFL: 100; GRE: 321+3.5)
Others:	Vocality, Calligraphy, Basketball, Leadership