# HANG WANG

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# **EDUCATION**

## University of Science and Technology of China (USTC), Hefei, China

2014 - 2018

*B.S.* Automation, **Honored Program** in Information Science and Computer Science *G. P. A.* 3.6/4.3 (rank 7/93)

# Nanyang Technological University, Singapore

Sep, 2018 – present

Research Enginner in School of Computer Science and Engineering(SCSE)

Twente University, Enschede, Netherlands

June, 2017 – Oct, 2017

CSC Research Internship in Biomedical Signals and Systems(BSS)

## RESEARCH INTEREST

Data Mining and Knowledge Discovery, Business Analytics, Optimization, Game Theory, Deep learning

## **PUBLICATION**

- Graphic Model Based Drug Recommender System(USTC Best Bachelor Thesis, Top 5%), Hang Wang, 2018 Class, USTC, details here
- Dual-layer Strengthened Collaborative Topic Regression Modeling for Predicting Drug Sensitivity (**Hang Wang**, Jianing Xi, Minghui Wang, Ao Li, 2018) *IEEE/ACM Transactions on Computational Biology and Bioinformatics*(TCBB), 10.1109/TCBB.2018.2864739, available here.
- One Inertial Sensor Based Upper Extremity Usage Measurement and Standard (**Hang Wang**, Mohamed Irfan Mohamed Refai, B. J. F. van Beijnnum, 2018), Oral Presentation by Irfan, research thesis is available here and paper is available here, 12th International Joint Conference on Biomedical Engineering Systems and Technologies, Prague, Czech, 2019.

## **EXPERIENCE**

## **LARGE-SCALE DISTRIBUTED DEEP LEARNING OPTIMIZATION** July, 2018 – Present

Sensetime, Shenzhen Supervisor: Dr. Sun Peng (Senior Researcher)

- Imagenet very-large-batch size(b = 256K) training optimization
- sparse communication optimization with NCCL, imporved group-ring-base collectives and synchronize SGD update

#### PRICE PREDICTION for P2P POWER TRADING

Sep, 2018 – Prensent

Nanyang Technological University Supervisor: Prof. Wen Yonggang and Dr. Gao Guanyu

- game-theory based incentivizing energy trading for solar microgrids
- the electricity powen pricing prediction based on the principle of blockchain

### PRECISION MEDICINE RECOMMENDER SYSTEM, HI lab, USTC

Feb, 2017 – Present

National Natural Science Foundation Program Supervisor: Prof. Li Ao

- design a PGM model to integrate multi-source information
- establish a novel bayesian-based collaborative topic regression model
- develop a variational EM algorithm to learn the maximum a posterior estimates
- validate and compare the efficiency on GDSC public data set.

Netherlands National Project: NeuroCIMT Surpervisor: Dr.ir. B. J. F. van Beijnum

- kinematics modeling for patients with central neurological disorders.
- put forward a novel processing structure to measure the arm usage.
- pattern recognition for the motion types through statistics learning.

## ♥ Honors

Hornable Degree in School of Information Science and Technology	Talented program, 2017
The Silver Prize Scholarship	Top 10%, 2017
University-level excellent League leader	Top 5%, 2016
University-level excellent League member	Top 5%, 2015
Excellent leader of the Student Union	Outstanding leadership, 2015
Shanghai Institute of Microsystem and Information Technology Scholarship	Top 5%, 2015
Chen Guilin leadership scholarship	Outstanding leadership, 2015
Scholarship for Outstanding Fresher	2014

## i EXTRACURRICULUM EVENTS

Principles of Automatic Control	Teaching assistant, 2017
Comprehensive Affair Office of the USTC Student Union	Director, 2016–2017
USTC Alumni Forum	Outstanding volunteer, 2016
Go Abroad from USTC Handbook	Editor, 2015
General affairs in class 3	Commissary, 2014–present
Interest group on Quantum Communication	Group leader, 2014–2015
Chinese amateur violin certificate, level 8	Amateur violinist, 2012

# **Y** SKILLS

**Machine languages:** C, C++, R, Python, Java, HTML, SQL, Matlab, LATEX, Verilog **Human languages:** Native Chinese, Fluent English, Simple Dutch, Simple Japanese

## RELATED COURSES

Course	Type	Score	Course	Type	Score
Function of Complex Variable	Math	A	Fundamental signal and Image Processing	CS	A+
Equation of Mathematical Physics	Math	A	Data structure and Algorithm	CS	A
System Identification	Math	A+	Operating System and Database	CS	A
Mathematical Analysis B1	Math	A-	Fundamentals of Computer Control	CS	A+
Fundamentals of Operations Research	Math	A-	Computer programming	CS	A-
Stochastic Processing	Math	A	Modern Control Theory	EE	A+
Lineal Algebra	Math	A-	Signals and Systems	EE	A-
Fundamentals of Electronic System Design	EE	A-	Sensor principle	EE	A+
Principles of Automatic Control	EE	A	Basic Circuit Theory	EE	A-
Digit logic Circuit	EE	A	Electromagnetism(C)	EE	A-

## □ REFEREE

Prof. Ao Li aoli@ustc.edu.cn

**Prof. Yong Wang** yongwang@ustc.edu.cn

Prof. Bert-Jan van Beijnum b.j.f.vanbeijnum@utwente.nl