Shuaiyu Liang

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EDUCATION

NEW YORK UNIVERSITY
MS in Electrical Engineering
Grad. May 2017 | Brooklyn, NY
Cum. GPA: 3.80 / 4.0

HARBIN INSTITUTE OF TECHNOLOGY
BEng in Electronic and Information Engineering,
Grad. Jun. 2015 | Harbin, China
Cum. GPA: 82.7 /100

LINKS

Github:// **bubbledoodle**
LinkedIn:// **shuaiyuliang**

COURSEWORK

GRADUATE
Advanced Machine Learning
3-D Computer Vision
Real Time Embedded system
Audio content processing
Computer Network
Cloud Computing

UNDERGRADUATE
Operating Systems
Probability and Stochastic Process
Pattern Recognition
Introduction to Algorithms
Software Defined Radio
(Research Asst.)

SKILLS

PROGRAMMING
C • Java • CUDA C • P4
Python • Matlab • Shell • Lua • LaTeX
SQL • VHDL • Assembly

ENGINEERING TOOLS
Git • DPDK • GENI
Tensorflow • Torch

LANGUAGE
Native Mandarin
Proficiency in English

ACADEMIC & RESEARCH EXPERIENCE

NYU HIGH SPEED NETWORK LAB | Graduate Assistant
Sep. 2016 - May 2017 | Brooklyn, NY

- Worked on graduate level course EL6383-high-speed-network lab material plan, design & implementation: 10GBps multi-flow detection and traffic ranking.
- Worked on congested-switch data local detour project implementation. Designed and implemented project testbed on Linux server. Primarily working under DPDK environment utilizing QoS scheduling & pktgen applications.
- Worked on high speed software router design. Implemented data-flow based P4 software router with accessing control function, tested in Mininet.

MACHINE LEARNING PROJECTS | course projects
Jan 2017 – May 2017 | Brooklyn, NY

- Project1: Inherited both the efficiency from online k-means clustering algorithm and the non-linear separable spectral clustering algorithm, combined with neural network, proposed and implemented an efficient clustering algorithm in Matlab. Tested with multiple datasets. Enhanced either in computation speed or accuracy respect to off-line method and online method.
- Project2: Implemented a 3-D mesh search engine. Implemented Dijkstra, Hungarian, k-center and k-mean algorithm respectively.

NETWORK MODELLING PROJECTS | course projects
Jan 2016 – May 2016 | Brooklyn, NY

- Implemented test-bed on GENI. Reproduced and tested the paper: The buffer bloat effect on on/off DASH player.
- Designed test-beds on GENI to test and analyze queuing model M/M/1 and M/D/1.

HIT SIGNAL PROCESSING LAB | undergrad research assistant
Sep. 2014 – Jun. 2015 | Harbin, China

- Worked with researcher in general computing radar signal processing group, designed and implemented two algorithms: the pulse compression and the 32-by-32 array digital beam forming with NVIDIA GPU, under real-time radar signal processing system. Developed originally under Matlab for understanding and then transferred to CUDA environment.
- Tested with real data, the solution worked under real time, also passed the long term robust test.

AWARDS

2016	top 6%ile	MS student Academic Achievement Award, NYU, US
2015		Two Year's MS scholarship, NYU, US
2015	top 10%ile	Outstanding Graduation Award, HIT, CN
2015		Five times Dean's list, HIT, CN
2014		UWA-CHINA Research Training Award, UWA, AU

SOCIETY

2016	Semester	Orientation Leader, NYU
2014	Annual	VP, HIT International Communication Association (HICA)
2013	International	Student speaker, 8th Sino-Japan president Forum
2013	International	Keynote speaker, ASRTU Youth Forum
2012	International	Delegation Leader, ICISTS-KAIST