Chon Lam, LAO

MACAU S.A.R.

Master's Student Research in Networked Systems, ML Systems

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EDUCATION

Tsinghua University, Beijing
Master of Computer Science, 2018 - now (third-year, pursuing)

National Cheng Kung University, Taiwan
Bachelor of Computer Science & Information Engineering, 2015 - 2018
(GPA 3.91/4.3 with Top 10% ranking, one-year earlier graduation)

INTERESTS & KEYWORDS

Software-Defined Network - - - Ryu, OpenFlow, In-network Computation
Distributed Training - - - - - - - - - - - - - - - - - Pytorch, Tensorflow, BytePS
Network Programming -RDMA, DMA
Programming Language - - - - - - - - - - - - - - - - - P4, C, C++, Python, Java

EXPERIENCE

Visiting Scholar,
University of Wisconsin–Madison (UWM);
2019 - 2020

To work on the independent study of building an in-network aggregation service to accelerate DT jobs in multi-tenant multi-rack networks by P4 programmable switches under the supervision of Professor Aditya Akella. Focus on the best effort in-network aggregation primitive by co-designing the hardware-software and the end-host networking stack.

Research Assistant,
The University of Hong Kong (HKU);
2017 - 2017

Three months of summer Internship in HKU, responsible for implementing the Machine Learning model (CNN) to improve the accuracy of variant calling software, doing experiments and benchmarking.

Teaching Assistant,
Tsinghua University (THU);
National Cheng Kung University (NCKU);
2017 - 2019

As a teaching assistant and lecturer of the course "Advanced Competitive Programming" in NCKU, familiar with a great variety of data structures and algorithms. As the teaching assistant of "Security Technologies in Cyberspace" in THU in the first year of the Master's program.

Network Administrator,
National Cheng Kung University (NCKU);
2016 - 2018

Applying CCNA to organize and manage the network environment and servers as a part-time network administrator at the Department of MLSB at NCKU.

Project Executor,
Ministry of Science and Technology of Taiwan;
2017 - 2017

Received government funding and held the undergraduate student research project in "Detecting DDoS Attack in Software-Defined Network through Convolutional Neural Network" in Taiwan.

REWARDS & QUALIFICATIONS

- Algorithm
- Top 6% in 2017 Taiwan Collegiate Programming Examination
- Bronze Prize of 2017 ACM-ICPC Asia Taiwan Regional Contest
- Silver Reward of 2014 Macao Olympiad in Informatics (MOI)
- Second Prize of 2013 National Olympiad in Informatics in Province (NOIP)
- Silver Reward of 2013 Macao Olympiad in Informatics (MOI)
- Second Prize of 2012 National Olympiad in Informatics in Province (NOIP)
- Silver Reward of 2012 Macao Olympiad in Informatics (MOI)

- Networking
- Gold Reward of 11 TH HK / MO Youth Network Skills Competition CISCO
- Silver Reward of 10 TH HK / MO Youth Network Skills Competition CISCO
- Cisco Certified Network Associate (CCNA)

- Scholarships
- The Baogang Scholarship (2020 - 2021)
- First price of Tsinghua University Scholarship MO/HK/TW (2018 - 2020)
- Macau Government Scholarship for Master Student (2018 - 2020)
- Taiwan Government Scholarship for Oversea Student (2015 - 2018)
- Macau Government Scholarship (2015 - 2018)

CONFERENCES & PUBLICATIONS

- "ATP: In-network Aggregation for Multi-tenant Learning",
ChonLam Lao*, Yanfang Le, Kshiteej Mahajan, Yixi Chen, Wenfei Wu,
Aditya Akella, Michael Swift, *NSDI 2021, Boston, MA, USA.*

- "Detecting DDoS Attack in Software-Defined Network (SDN) through
Convolutional Neural Network",
ChonLam Lao*, K.-Y. Liow, and M.-H. Tsai, *22th Mobile Computing Conference,
Kaosiung, August 2017* (Chinese Publication)

RELATED LINKS

Github - https://github.com/laochanlam
Lam's Tech Blog - https://blog.laochanlam.com/