

MINGRAN YANG

Email: mingrany@mit.edu ◊ Website: <https://mingrany.github.io/>

EDUCATION

Massachusetts Institute of Technology Cambridge, MA, USA
Ph.D. in Electrical Engineering and Computer Science Aug 2020 - *Now*
Advisor: Prof. Manya Ghobadi

Carnegie Mellon University Pittsburgh, PA, USA
M.S. in Information Networking. GPA: 3.95/4.00 Aug 2018 - May 2020
Advisor: Prof. Vyas Sekar

Fudan University Shanghai, China
B.Eng. in Electrical Engineering. GPA: 3.82/4.0 (Rank: 1st/171) Sep 2014 - Jul 2018
Graduated with honor from *Elite Engineer Program* in Fudan University (top 5%)

PUBLICATION

1. Joltik: Enabling Energy-Efficient "Future-Proof" Analytics on Low-Power Wide-Area Networks
Mingran Yang, Junbo Zhang, Akshay Gadre, Zaoxing Liu, Swarun Kumar, and Vyas Sekar
In *Proceedings of the 26th ACM Conference on Mobile Computing and Networking (MobiCom)*, 2020
[\[Paper PDF\]](#) [\[Elevator Pitch\]](#) [\[Full Presentation\]](#) [\[Code\]](#)
2. Challenging the Stateless Quo of Programmable Switches
Nadeen Gebara, Alberto Lerner, **Mingran Yang**, Minlan Yu, Paolo Costa, and Manya Ghobadi
In *Proceedings of the 19th ACM Workshop on Hot Topics in Networks (HotNets)*, 2020

HONORS AND AWARDS

- **MIT Presidential Fellowship**, MIT Jun 2020
- **Outstanding Research Assistant Award**, Information Networking Institute, CMU May 2020
- **Merit Admission Scholarship**, Information Networking Institute, CMU Aug 2018
- **Shanghai Outstanding Graduate Student** (top 5%), Fudan University Jun 2018
- **Women Techmakers Scholar**, Google Jul 2017
- **National Scholarship** (rank 1st in class), Ministry of Education of China Nov 2016
- **Tung OACL Scholarship** (top 5%), Fudan University Dec 2015

RESEARCH EXPERIENCE

Massachusetts Institute of Technology (Graduate Research Assistant) Cambridge, MA, USA
Advisor: Prof. Manya Ghobadi Aug 2020 - present
Topic: Programmable Switches, Network Systems for Machine Learning

Carnegie Mellon University (Graduate Research Assistant) Pittsburgh, PA, USA
Advisor: Prof. Vyas Sekar Jan 2019 - May 2020
Topic: Building Framework Enabling General, Future-Proof, and Energy-Efficient Analytics for LPWANs

University of California, Los Angeles (Research Assistant) Los Angeles, CA, USA
Advisor: Prof. Wentai Liu Jul 2017 - Sep 2017
Topic: Digital and Analog Circuit Design for Biomedical Applications

Fudan University (Undergraduate Research Assistant) Shanghai, China
Advisor: Prof. C.-J. Richard Shi Jun 2016 - May 2017
Topic: Low-Power Digital Baseband Design for Neural Signal Recording and Processing Chip

WORKING EXPERIENCE

Carnegie Mellon University

Teaching Assistant

Pittsburgh, PA, USA

Aug 2019 - Dec 2019

- TA for course 15441/641 Computer Networks (Instructor: Prof. Peter Steenkiste & Prof. Justine Sherry)

National Instruments

FPGA Software Engineer Intern

Shanghai, China

Mar 2018 - Jun 2018

- Built Verilog support in LabVIEW NXG, enabled parsing, simulation and compilation for Verilog projects
- Enabled sharing of Verilog source and simulation model between LabVIEW NXG and Compile Worker

LANGUAGE AND SKILLS

Language Level

TOEFL 108/120 (Speaking: 26, Writing: 28, Reading: 27, Listening: 27)

Programming Languages

C, C++, Python, Java, C#, Verilog, VHDL, MATLAB