Scofield Zhengqing Liu

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◇ Email ◇ LinkedIn ◇ GitHub

EDUCATION

École Polytechnique, Paris, France — Sep. 2020 - Aug. 2022
Master Degree (**cum laude**) in Internet of Things — 3.85/4, Rank **1st**
Supervisors: Prof. Thomas Heide Clausen, Prof. Juan Antonio Cordero

South China University of Technology, Guangzhou, China — Sep. 2017 - Aug. 2020
Bachelor Degree in Electrical Engineering and its Automation — 86.8/100

Columbia University, New York, United States — July 2019 - Aug. 2019
Summer School in Artificial Intelligence, Intensive American Languages

RESEARCH INTERESTS

I am broadly interested in **Systems** and **Networking** research. I have worked on **Programmable Networks** and **Cloud Data Center Systems**.

EXPERIENCE

Max Planck Institute for Informatics (MPI-INF) — Saarbrucken, Germany
Research Intern, Network and Cloud System Group
Advisor: Prof. Yiting Xia — April 2022 - Sep. 2022

- Implement Hop-On Hop-Off routing system (APNet'22) for Optical Data Center Networks (DCNs) on Intel Tofino2 switch
- Design time synchronization protocol for Optical DCNs at the precision of nanosecond level, and help implement time-based packet scheduling mechanism
- (Under Submission) EgoDCN: An End-to-end Implementation of General Optical Data Center Networks

National Institute for Research in Digital Science and Technology (INRIA) — Paris, France
Research Assistant, Delys team (Joint team of INRIA, LIP6, CNRS)
Advisor: Prof. Marc Shapiro — Dec. 2021 - March 2022

- Implement Query Processing Unit (PaPoc'18), a modular design for geo-distributed querying in the AKKA actor model using Java

ETH Zurich — Zurich, Switzerland
Research Intern, Networked System Group
Advisors: Prof. Laurent Vanbever, Dr. Romain Jacob — March 2021 - Aug. 2021

- Reproduce Data-Driven Connectivity (NSDI'13), a failure reroute protocol, via P4 software switches
- Thesis: [Re] Ensuring Connectivity via Data Plane Mechanisms

AWARDS

1. The École Polytechnique Foundation Scholarship (6,000€), France, 2021
2. Admission Scholarship (6,000€), École Polytechnique, France, 2020
3. First Class Scholarship (top 5%), South China University of Technology, China, 2018
4. Merit Student Award, South China University of Technology, China, 2018

SERVICES

EuroSys 2023 Artifact Evaluation Committee
SIGCOMM 2022 N2Women Workshop Volunteer

COURSEWORK

Advanced Computer Networks, Operating System and Computer Architecture, Parallel and Distributed Algorithms, Database Management System, IoT Workshops, Network Security, Information System Security, Analog and Digital Circuits

SKILLS

Programming skills: C/C++, Java, Python, P4, CUDA, Verilog, SQL, JavaScript
Languages: English, Mandarin, French(B1)