

Kenuo Xu

PH.D. STUDENT · PEKING UNIVERSITY

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Education

Peking University

PH.D. IN COMPUTER SCIENCE

Beijing, China

Sep. 2020 - Present

- In the Software-hardware Orchestrated ARchitecture (SOAR) group; advisor: Prof. Chenren Xu
- Design a visible light backscatter communication system that supports concurrent transmission for low latency purpose.
- Design a visible light communication system with spike cameras as receivers to achieve high data rate and dynamic range.
- See publications for more research.

Peking University

B.SC. IN COMPUTER SCIENCE

Beijing, China

Sep. 2016 - Jun. 2020

- Graduated with Excellent Graduate Award

Publications

RetroV2X: A New V2X Paradigm with Visible Light Backscatter Networking

Fundamental Research

CHENREN XU, **KENUO XU**, LILEI FENG, BO LIANG

Accepted

- A practical vehicle-to-everything communication system with visible light.

VLID: Visible Light Backscatter System for Battery-free Internet-of-Things

IEEE/ACM Transactions on
Networking

CHENREN XU, PURUI WANG, TUOCHAO CHEN, YUE WU, **KENUO XU**, XIEYANG XU, YANG SHEN, JUNRUI YANG, GUOJUN CHEN,
GUOBIN SHEN

Accepted

- An end-to-end VLBC solution for battery-free IoT networking.

Renovating road signs for infrastructure-to-vehicle networking: a visible light backscatter communication and networking approach

ACM MobiCom

PURUI WANG, LILEI FENG, GUOJUN CHEN, CHENREN XU, YUE WU, **KENUO XU**, GUOBIN SHEN, KUNTAI DU, GANG HUANG,
XUANZHE LIU

2020

- Enhance the reliability of autonomous driving with reflective roads signs that conveys dynamic additional information.

Turboboosting Visible Light Backscatter Communication

ACM SIGCOMM

YUE WU, PURUI WANG, **KENUO XU**, LILEI FENG, CHENREN XU

2020

- Improve the data rate of VLBC by 8x (prototype) and 32x (simulation) with advanced modulation schemes.

Honors & Awards

2021 **First Prize**, Competition of Future Network Technology Innovation

Nanjing, China

2020 **Excellent Graduate**, Peking University

Beijing, China

2019 **Houston BAA Scholarship**, Peking University

Beijing, China

2019 **Merit Student**, Peking University

Beijing, China

Activities

Teaching Assistant

Peking University

COMPUTER NETWORKS (HONOR TRACK)

Fall 2019, 2020, 2021(Light)

- Organizing the course and answering questions.
- Giving assignments, tutorials, and grading of labs.
- Mentoring course research projects.
- Designing quizzes and grading students' responses.

Journal Reviewer

PROCEEDINGS OF THE ACM ON INTERACTIVE, MOBILE, WEARABLE AND UBIQUITOUS TECHNOLOGIES (IMWUT)

2021