

# Yongzhou Chen

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## EDUCATION

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### University of Illinois, Urbana-Champaign

*Ph.D. candidate in Computer Engineering*

- GPA **3.94** / 4.0, Advisor: [Prof. Radhika Mittal](#)

IL, USA

Sep 2019 – Present

### University of Science and Technology of China (USTC)

*B.S. in Computer Science with honors*

- Top **5%** with *summa cum laude*

Hefei, China

Sep 2015 – Jun 2019

## SELECTED RESEARCH PROJECTS

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### Semantic Buffer Management in Cellular Networks for Real-time Applications

Advisor: [Prof. Radhika Mittal](#)

- Designed a cross-layer system which leverages smart in-network buffer management to achieve high throughput and low latency for real-time applications over cellular network
- Implemented a message-aware transport protocol which encodes the dropping policies in packet headers, handles in-network packets drop properly, and applies BBR congestion control
- Implemented the buffer management logic and dropping primitives in the cellular router and the transport buffer
- Real-time video applications built upon our system achieve 28-90% lower tail AoI(Age-of-information) and 17% higher video QoE than state-of-the-art systems Salsify and AWStream

UIUC

Jun 2020 - Sep 2021

### BlinkSwap: a Low-Latency Swap System for Memory-Based Swap Device

Advisor: [Prof. Yiyang Zhang](#)

- Profiled the overhead of page fault and memory swapping in Linux kernel
- Implemented a low-latency memory swapping system in kernel with concurrent and parallel page out for memory disaggregation

Purdue University

Jul 2018 – Dec 2018

## PREPRINT

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- **Semantic Buffer Management in Cellular Networks for Real-time Applications**

**Yongzhou Chen**, Ammar Tahir, Radhika Mittal

in submission to NSDI 2022

## TEACHING EXPERIENCE

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### Graduate Student Teaching Assistant

- *ECE120*: Introduction to Computing

UIUC

Spring 2020

## AWARDS AND HONORS

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- Excellent graduate of Anhui Province Jun 2019
- OSDI'18 Student Travel Grant Oct 2018
- Scholarship for Honors Classes in Computer Science (Top 10% for academic achievement) 2017-2019
- Outstanding Student Scholarship (Top 10% for excellent research) 2017-2019
- First Prize in the 5th Student RDMA Programming Competition 2017
- National Scholarship (Top 2% for academic achievement) 2016

## SKILLS AND TECHNIQUES

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- *Programming Languages*: C/C++, Java, Go, Python, Rust, P4, Verilog
- *Skills*: Socket Programming, RDMA, Kernel Programming, Maxine JVM, NS-2/3, Programmable Switch

## SELECTED COURSES

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- High-Speed/Programmable Networks(A); Advanced Operating Systems(A); Advanced Distributed Systems(A); Principles of Blockchains(A+); Machine Learning(A-)