Pengyuan Zhou

Page: https://zpymyyn.github.io/ pengyuan.zhou@helsinki.fi

RESEARCH INTERESTS **EDUCATION** Edge Computing, Connected Vehicules, AIoT, Mobile AR

PhD, Computer Science

Supervisor: Prof. Jussi Kangasharju, Prof.Pan Hui

University of Science and Technology Beijing, China

M.Sc, Electrical Engineering Supervisor: Prof.Siquan Hu

University of Helsinki, Finland

University of Science and Technology Beijing, China

B.Sc, Electrical Engineering

EXPERIENCE Hong Kong University of Science and Technology, Hong Kong

> Visiting Researcher Collaborated with HKUST-DT System and Media Laboratory for Edge Computing powered Vehicle

Network.

Host: Prof.Dr.Pan Hui

UNINETT, Norway

Visiting Researcher

Collaborated with UNINETT for clustering user request upon similarity to optimize CDN perfor-

mance.

Host: Prof.Dr.Otto J Wittner

Ruijie Networks, China

Network Engineer Intern Participated in National 863 subproject on SDN.

SCHOLARSHIP Marie Curie ITN Funding

CleanSky ITN, funded by the Marie-Curie-Actions within

the 7th Framework Programme of the European Union (EU FP7)

Master program full scholarship

University of Science and Technology Beijing

PROJEDTS Where's My Data

The project investigates distributed data management in edge computing environments, targeting Industrial Internet applications.

PI:Prof.Dr.Jussi Kangasharju (Univ. of Helsinki)

CleanSky ITN **Europe Union**

CleanSky aims to develop innovative ideas in the emerging areas

within the eco-system of cloud computing.

Collaboration: Nine university of industrial institutes in Europe, China and USA.

PI: Prof.Dr.Xiaoming Fu (Univ. of Gottingen)

Defense planning in May, 2020

January 2015

July 2011

2018.02-06

2017.02-06

2013-2014

2015-2018

2012-2015

Academy of Finland

2018-2019

PAPERS			
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- [In Revision] Edge-facilitated Augmented Vision in Vehicle-to-Everything Network **P. Zhou**, T. Braud, A. Zavodovski, Z. Liu, F. Xian, W. Zhang, P. Hui and J. Kangasharju IEEE Transactions on Vehicular Technology
- TVT
- Multipath Computation Offloading for Mobile Augmented Reality
 T. Braud, P. Zhou, J. Kangasharju and P. Hui
 IEEE International Conference on Pervasive Computing and Communications
 Acceptance rate: 14.2%
- PERCOM'20
- Enhanced Augmented Reality Applications in Vehicle-to-Edge Networks **P. Zhou**, W. Zhang, T. Braud, P. Hui and J. Kangasharju IEEE Conference on Innovation in Clouds, Internet and Networks

ICIN'19

• DeCloud: Truthful Decentralized Double Auction for Edge Clouds A. Zavodovski, S. Bayhan, N. Mohan, **P.Zhou**, W. Wong, J. Kangasharju IEEE International Conference on Distributed Computing Systems ICDCS'19

- ERL: Edge Based Reinforcement Learning for Optimized Urban Traffic Light Control SmartEdge'19 P. Zhou, T. Braud, A. Alhilal, P. Hui and J. Kangasharju 2019 SmartEdge@PERCOM Workshop
- Augmented Reality Applications in Vehicle to Edge Networks
 P. Zhou, W. Zhang, T. Braud, P. Hui and J. Kangasharju
 2018 MECOMM@SIGCOMM Workshop

MECOMM'18

Anveshak: Placing Edge Servers In The Wild
 N. Mohan, A. Zavodovski, P. Zhou and J. Kangasharju
 2018 MECOMM@SIGCOMM Workshop

MECOMM'18

Managing Data in Computational Edge Clouds
 N. Mohan, P. Zhou, K. Govindaraj, and J. Kangasharju
 2017 MECOMM@SIGCOMM Workshop

MECOMM'17

• Grouping Computational Data in Resource Caches of Edge-Fog Cloud N. Mohan, **P. Zhou**, K. Govindaraj, and J. Kangasharju 2017 CrossCloud@EuroSys Workshop CrossCloud'17

CAN'16

Profiling and Grouping Users to Edge Resources According to User Interest Similarity
 P. Zhou and J. Kangasharju
 2016 CAN@CoNEXT Workshop

ACADEMIC SERVICES

China Europe Association for Computer Science

Co-founder & Chair 2017 - now

http://ceacs.eu/

Aims at promoting Industry-University-Research Collaboration in computer science between China and Europe.

Edge Hackathon (link)

Chair

The first hackathon focusing on Edge Computing with 2000 EUR as winner prize.

3rd International CleanSky Conference

Organizer

2nd International CleanSky Summer School

Organizer

TALKS

• Enhanced Augmented Reality Applications in Vehicle-to-Edge Networks Paper Presentation at ICIN 2019

Paris, 2019

• ERL: Edge Based Reinforcement Learning for Traffic Light Control Paper Presentation at SmartEdge 2019 (Percom)

 $Kyoto,\ 2019$

• Augmented Reality Applications in Vehicle to Edge Networks Paper Presentation at MECOMM 2018 (SIGCOMM) Budapest, 2018

• The era of Edge Introduction at Edge Hackathon Helsinki, 2017

Introduction at Edge HackathonUser Interest Profiling

Dagstuhl, 2016

Invited talk at GI-Dagstuhl Seminar 16353

Irvine, California 2016

• Profiling and Grouping Users to Edge Resources Paper Presentation at CAN 2016 (CoNEXT)

TECHNICAL SKILLS

Programming: Java, C++, C, BASH, python, HTML5, LATEX

Develop: Linux Kernel, Raspberry pi, IEEE 802.11p, Android application

Language : Chinese (native), English (business, GRE(320/340))

TEACHING

Networked Systems and Services

TA, 2018

University of Helsinki

Networked Systems and Services

TA, 2017

University of Helsinki

C++ programming

TA, 2014

University of Science and Technology Beijing

REFERENCES

Prof.Dr.Jussi Kangasharju

University of Helsinki

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Prof.Dr.Pan Hui

Hong Kong University of Science and Technology, University of Helsinki

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Prof.Dr.Xiaoming Fu

Georg-August-University of Goettingen

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