郑策

个人信息

职位：无线研究员 (研究科学家)
工作单位: 索尼中国研究院
Email: ce.zheng@sony.com
chriszhengce123@163.com
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个人主页: https://chriszhengce.github.io/index.html
出生地: 山东，中国
出生日期: 1991 年 10 月 15 日
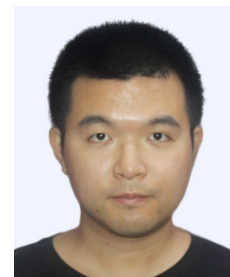
工作经历

索尼中国研究院   2021.08 - 至今

无线研究员/研究科学家（科学家岗）
国际标准组织 3GPP SA2 代表（Delegate）
研究方向：联邦学习，XR，Sidelink 等

法国科学研究院（CNRS）   2017.10 - 2020.10

研究员

博士课题

"Impulsive and Dependent Interference Modeling in IoT Networks", funded by ARBurst

教育背景

里尔大学，法国，博士   2017.10 - 2020.10
导师：Laurent CLAVIER & Malcolm EGAN

奥尔堡大学，丹麦，项目交换   2019.09 - 2019.12
导师：Troels PEDERSEN & Petar POPOVSKI (IEEE Fellow)

西安交通大学，中国，硕士   2013.09 - 2016.07
导师：罗新民

哈尔滨工业大学，中国，本科   2009.09 - 2013.07
导师：赵洪林

访学经历

CITI-LAB, INSA Lyon，里昂，法国   2018.12
1st Winter School on Information Theory and Signal Processing for Internet of Things

德岛大学，德岛，日本   2014.07 - 2014.08
The Electrical and Information Science Course Program

加州大学洛杉矶分校，洛杉矶，美国   2014.02 - 2014.03
American Language Center Intensive English Communication Program

奖励荣誉

Mobility Grant，欧盟   2019
支持本人在丹麦奥尔堡大学访问的费用

IRACON 5th TS Grant，欧盟   2019
支持本人在 INSA Lyon 访问的费用

研究生奖学金, 中国   2016-2019
免除三年学费及生活费支持

学术论文

Qiong Liu, Chenhao Wang, **Ce Zheng**, "Distributed Decisions on Optimal Load Balancing in Loss Networks", *In 2023 IEEE Global Communications Conference* (To be submitted)

Ce Zheng, Shiyao Ma, Chen Sun, "How to Use Machine Learning to Aide Federated Learning: Exploiting Metadata in UE Selection", *In 2023 IEEE International Conference on Computer Communications (INFOCOM)* (To be submitted)

Ce Zheng, Tianming Zang, Wei Chen, Shiyao Ma, Chen Sun, "A General Solution for Straggler Effect and Unreliable Communication in Federated Learning", *In 2023 IEEE International Conference on Communications (ICC).* (Under Review)

Ce Zheng, Tianming Zang, Wei Chen, Shiyao Ma, Chen Sun, "How to Exploit 3GPP Parameters for Federated Learning: A General UE Selection Approach by Clustering", *In 2023 IEEE Journal on Selected Areas in Communications (JSAC).* (Under Review)

Ce Zheng, Malcolm Egan, Laurent Clavier, Gareth W. Peters, Jean-Marie Gorce, "On the interference arising from random spatial fields of interferers utilizing multiple subcarriers", *In: EURASIP Journal on Wireless Communications and Networking. 2022 ; Vol. 2022.*

Ce Zheng, Malcolm Egan, Laurent Clavier, Petar Popovski, Anders Ellersgaard Kalør, "Stochastic Resource Allocation for Outage Minimization in Random Access with Correlated Activation", *In 2022 IEEE Wireless Communications and Networking Conference (WCNC).* (pp. 1-6), Austin, US

Ce Zheng, Malcolm Egan, Laurent Clavier, Petar Popovski, Anders Ellersgaard Kalør, "Stochastic Resource Optimization of Random Access for Transmitters with Correlated Activation", *In 2021 IEEE Communication Letters*

Ce Zheng, Malcolm Egan, Laurent Clavier, Troels Pedersen and Jean-Marie Gorce. "Linear Combining in Dependent α-Stable Interference", *In 2020 IEEE International Conference on Communications (ICC)* (pp. 1-6), Dublin, Ireland.

Ce Zheng, Egan Malcolm, Laurent Clavier, Gareth W. Peters, Gorce, Jean-Marie. "On the Validity of Isotropic Complex α-Stable Interference Models for Interference in the IoT" *In 2019 GRETSI, Groupe d'Etudes du Traitement du Signal et des Images.*

Ce Zheng, Egan Malcolm, Laurent Clavier, Gareth W. Peters, Gorce, Jean-Marie. "Copula-Based Interference Models for IoT Wireless Networks" *In 2019 IEEE International Conference on Communications (ICC)* (pp. 1-6),

Shanghai, China.

Egan Malcolm, Laurent Clavier, **Ce Zheng**, Mauro De Freitas, Jean-Marie Gorce. "Dynamic interference for uplink SCMA in large-scale wireless networks without coordination" *EURASIP Journal on Wireless Communications and Networking* 2018, no. 1 (2018): 213.

Ce Zheng, Jiancun Fan, and Xinmin Luo. "Spectrum and energy efficiency analysis of ultra dense network with sleep." *2016 8th IEEE International Conference on Communication Software and Networks (ICCSN)*.

专利

郑策, 孙晨. "A Split Learning (Model Splitting) Aided Federated Learning (SL-aided FL) Network". 2023 (filing)

陈巍, 刘远瑞, 郑策, 孙晨. "Sidelink-enhanced Model Splitting and Transmission Scheme between AI/ML Endpoints". 2022(filing)

郑策, 孙晨. "用于无线通信的电子设备和方法、计算机可读存储介质（联邦学习下的服务保障机制）". 2022 (filed)

郑策, 孙晨. ""分层联邦学习网络中的切换". 2022 (filed)

陈巍, 吴俊杰, 郑策, 孙晨. "用于无线通信的电子设备和方法、计算机可读存储介质（联邦学习下的 Sidelink 增强）". 2022 (filed)

陈巍, 谢瞻远, 郑策, 孙晨. "基于中继传输节点的车辆位置信息传输方法及系统". 2022 (filed)

学术报告

Online (29/11/2019 and 30/11/2021), *Choosing a proper starting point in SGD by exploiting dependence between features — an intuition from resource allocation in event triggered communication* 索尼 AI 大会, 索尼

AALBORG (13/11/2019 and 27/11/2019), *Copula Theory in Communication Society*, invited talk and hosted by Professor Petar POPOVSKI and Professor Troels PEDERSEN, Department of Electronics, 奥尔堡大学, 奥尔堡, 丹麦

AALBORG (30/09/2019 and 03/10/2019), *Modeling Impulsiveness and Dependence of Interference in Wireless Communication Network*, invited talk and hosted by Professor Troels PEDERSEN and Professor Petar POPOVSKI, Department of Electronics, 奥尔堡大学, 奥尔堡, 丹麦

GUANGZHOU (30/05/2019), *Interference Modeling for Wireless IoT Networks*, 特邀报告（陈立教授和 Dr. Ting-yi Wu）, 电子与通信工程学院, 中山大学, 广州, 中国

RENNES (06/03/2019), *Modeling Interference with α-stable and Copulas*, ARBurst Project meeting, ITER Lab, 雷恩, 法国

LILLE (12/06/2018), *Dependent Impulsive Interference modeling*, Seminar on 'Mathematics and IoT', IRCICA Lab, 里尔, 法国

LYON (11/10/2018), *Modeling of Dependence in Impulsive Interference and Copula Theory*, ARBurst Project meeting, CITI-lab, 里昂, 法国

RENNES (14/02/2018), *Copula Theory and Dependence in Interference*, ARBurst Project meeting, ITER Lab, 雷恩, 法国

研究技能

Matlab, Latex, Stochastic Geometry, Copula Theory, α-stable, Markov Chain, Federated Learning, NOMA, SCMA, NB-IoT, LPWAN, XR, AI, VMR, 3GPP SA1 & SA2

语言技能

普通话（母语）；
英语（精通）：TOEFL 96；
法语（初级）：A1；
日语（初级）