

# 郑策

## 个人信息

职位：博士后研究员

工作单位：巴黎理工-巴黎高等电信学院 (QS 38<sup>th</sup>)

Email: chriszhengce123@163.com

chriszhengce123@gmail.com

ce.zheng@telecom-paris.fr

手机号: +33 (0)6 19 02 31 59

+86 13335281561

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

巴黎理工-巴黎高等电信学院

2023.07 - 至今

博士后研究员

索尼中国研究院

2021.08 - 2023.06

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, Jean-Marie GORCE

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

---

### 在投:

**Ce Zheng**, Shiyao Ma, Chen Sun, “How to Use Machine Learning to Aid Federated Learning: Exploiting Meta-data in UE Selection”, *In 2023 IEEE Communication Letters* (To be submitted)

### 期刊:

**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 Optimization of Random Access for Transmitters with Correlated Activation](#)”, *In 2021 IEEE Communication Letters*

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.

### 会议 :

Chen Sun, Shiyao Ma, **Ce Zheng**, Songtao Wu, Tao Cui, Wenqi Zhang. “Federated Learning with CSMA based User Selection for IoT Applications”. (accepted in IEEE ICC conference)

Yunda Li, Le Zhao, Chen Sun, Haojin Li, **Ce Zheng**, “[An Iterative Joint Tx-Rx Hybrid Beamforming Method for Vehicular Networks](#)”, *In 2023 IEEE 98th Vehicular Technology Conference (VTC2023-Fall)*, 1-6

Qiong Liu, Chenhao Wang, **Ce Zheng**, “[Distributed Decisions on Optimal Load Balancing in Loss Networks](#)”, *In 21st International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks (WiOpt)*, Singapore, Singapore, 2023, pp. 464-471

Tianming Zang, **Ce Zheng** (corresponding author), Wei Chen, Shiyao Ma, Chen Sun, “[A General Solution for Straggler Effect and Unreliable Communication in Federated Learning](#)”, *In ICC 2023 - IEEE International Conference on Communications (ICC)*, Rome, Italy, 2023, pp. 1194-1199

**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 Com-*

*munications and Networking Conference (WCNC)*. (pp. 1-6), Austin, US

**Ce Zheng**, Malcolm Egan, Laurent Clavier, Troels Pedersen and Jean-Marie Gorce. “[Linear Combining in Dependent  \$\alpha\$ -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  \$\alpha\$ -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.

**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 & 标准化

---

**郑策**, 孙晨. “(一种分层树状联邦学习下的用户选择及资源分配方法)”. 申请号: 202310513237.9

**郑策**, 孙晨. “[用于无线通信系统的电子设备、方法和存储介质](#) (一种联邦学习中, 基于 sidelink 增强的性能提升方案及用户选择机制)”. 申请号: 202310436139.X

**郑策**, 孙晨. “[用于分割学习的电子设备和方法、计算机可读存储介质](#) (分割学习下, sidelink 增强的用户选择、用户执行顺序选择和模型传输链路选择方案)”. 申请号: 202310116586.7

**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](#) (SL-aided FL-分割学习辅助的联邦学习网络)”. 申请号: 202310342408.6

陈巍, 刘远瑞, **郑策**, 孙晨. “[用于模型推理的电子设备、方法和存储介质](#) (D2D 辅助下的用户与网络间的模型分割)”. 申请号: 202211502760.3

**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)”. 申请号: 202211286543.5

**郑策**, 孙晨. “分层联邦学习网络中的切换”. 专利公开号: CN117560722A.

— 该专利主要内容为: [一种分层联邦学习下的切换服务保障机制](#)

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”. 专利公开号: CN117454952A.

— 该专利主要内容为: [联邦学习的 V2X 边缘链路性能提升方案](#)

陈巍, 谢瞻远, **郑策**, 王晓雪, 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”. 专利公开号: CN117177209A.

— 该专利主要内容为: [基于中继传输节点的车辆位置信息传输方法及系统](#)

## 学术报告

---

**2023.05.29**, [A General Solution for Straggler Effect and Unreliable Communication in Federated Learning](#), IEEE International Conference on Communications, 罗马, 意大利

**2022.04.11**, [Stochastic Resource Allocation for Outage Minimization in Random Access with Correlated Activation](#), IEEE Wireless Communications and Networking Conference, 线上

2022.11.30, *Choosing a proper starting point in SGD by exploiting dependence between features — an intuition from resource allocation in event triggered communication*, Sony AI Conference, 线上

2022.05.22, *Linear Combining in Dependent  $\alpha$ -Stable Interference*, IEEE International Conference on Communications, 线上

2019.11.29, *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

2019.11.13, *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

2019.09.30, *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

2019.05.30, *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

2019.03.06, *Modeling Interference with  $\alpha$ -stable and Copulas*, ARBurst Project meeting, ITER Lab, 雷恩, 法国

2018.10.11, *Modeling of Dependence in Impulsive Interference and Copula Theory*, ARBurst Project meeting, CITI-lab, 里昂, 法国

2018.06.12, *Dependent Impulsive Interference modeling*, IRCICA Lab, 里尔, 法国

2018.02.14, *Copula Theory and Dependence in Interference*, ARBurst Project meeting, ITER Lab, 雷恩, 法国

研究技能

---

Matlab, Python, Latex, Stochastic Geometry, Copula Theory,  $\alpha$ -stable, Markov Chain, Federated Learning, NOMA, SCMA, NB-IoT, LPWAN, XR, AI, VMR, 3GPP SA1 & SA2  
面向每个人的生成式 AI (Generative AI for Everyone) on Coursera 01/2024

语言技能

---

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