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append: "/" %} {% endif %} {% assign url = gsDataBaseUrl | append: "google-scholar-  
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About Me

I'm a post-graduate student at [Automation School, Beijing Institute of Technology](#), and received B.Eng. degree from the [College of Information Science and Technology, Beijing University of Chemical Technology](#). As a member of the X-NS Group, I'm supervised by [A.P. Zhan Yufeng](#). My research interests include Video Analytics System and Edge Intelligence.

The people who are crazy enough to think that they can change the world, are the ones who do.

News

2024.04.13 🎉🎉 The latest paper “Tangram: High-resolution Video Analytics on Serverless Platform with SLO-aware Batching” has been accepted in IEEE ICDCS 2024.

- 2024.04.01 🎉🎉 The paper “Octopus: An End-to-end Multi-DAG Scheduling Method Based on Deep Reinforcement Learning” has been accpet as a poster paper in CCC 2024.
- 2023.12.16 🎉🎉 Won the First Prize of The 20th China Post-Graduate Mathematical Contest in Modeling and the [Champion of Mathematical Modeling Star](#).
- 2022.08.31 🎉🎉 The paper “*Lore: A Learning-based Approach for Workflow Scheduling*” has been accpet as a poster paper in RACS 2022.
- 2022.07.11 🎉🎉 Received an [acceptance letter](#) from the School of Automation, Beijing Institute of Technology!
- 2022.06 🎉🎉 My graduation thesis was awarded as [BUCT Excellent graduation thesis!](#)



Publication



Articles

ACM MM 2024



Arena: A Patch-of-Interest ViT Inference Acceleration System for Edge-Assisted Video Analytics

Submitted to ACM MM 2024

```
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Octopus: An End-to-end Multi-DAG Scheduling Method Based on Deep Reinforcement Learning

43rd Chinese Control Conference

Yi Chang, **Haosong Peng**, Yufeng Zhan, Yuanqing Xia

IEEE ICDCS 2024



Tangram: High-resolution Video Analytics on Serverless Platform with SLO-aware Batching

2024 International Conference on Distributed Computing Systems

Haosong Peng, Yufeng Zhan, Peng Li, Yuanqing Xia

IEEE TSC



Egret: Reinforcement Mechanism for Sequential Computation Offloading in Edge Computing

Submitted to IEEE Transactions on Service Computing

RACS 2022



Lore: A Learning-based Approach for Workflow Scheduling in Clouds

2022 International Conference on Research in Adaptive and Convergent Systems

Haosong Peng, Chuge Wu, Yufeng Zhan, Yuanqing Xia

[Talk](#) | [Slide](#)

IEEE Access



[**Trajectory Tracking of a Novel Underactuated AUV via Nonsingular Integral Terminal Sliding Mode Control**](<https://ieeexplore.ieee.org/document/9492070>)

IEEE Access | 07-20-2021

Zhiwei Wu, **Haosong Peng**^{*}, Biao Hu, Xiaodong Feng



Patents

- 一种针对目标检测的云边协同方法、装置及产品（已受理，除导师外第一发明人）
- 一种视频分析边缘计算加速方法、装置、介质及产品（已受理，除导师外第一发明人）

- 一种基于图神经网络的 LRA 调度方法、设备及介质（已受理，除导师外第三发明人）



Educations

- 2022.09 - 2025.06 (*now*), Post-graduate, Automation School, Beijing Institute of Technology, Beijing
- 2018.09 - 2022.06, Undergraduate, the College of Information Science and Technology, Beijing University of Chemical and Technology, Beijing

Rank: 1/153 | GPA: 4.07/4.33

- 2015.09-2018.06, Chongqing Yucai Secondary School, Chongqing



Honors and Awards

- 2023.11 First Prize of The 20th China Post-Graduate Mathematical Contest in Modeling.
- 2023.11 First Prize of Huawei Special Award, [Champion of Mathematical Modeling Star](#) (Top 0.05%, First in BIT History.)
- 2023.10 First-class scholarship of Beijing Institute of Technology
- 2022.06 Outstanding Graduates of Beijing
- 2022.06 Outstanding Graduation Project of Beijing University of Chemical Technology
- 2020.10 National Scholarship (Top 1%)
- 2019.10 National Scholarship (Top 1%)



Internships

- 2022.06 - 2022.07, [China Academy of Information and Communications Technology \(CAICT\)](#), Chongqing.



Links

- Group Members

- Ruifeng Ma
- Tlanyu Qi

- Co-authors

- Hao Li
- Zhiwei Wu