Junsong Chen

Github: https://lawrence-cj.github.io/

### **EDUCATION**

Dalian University of Technology

Dalian, China

Master and Ph.D. Candidate - Information and Communication Engineering

July 2021 - Present

Research Interests: Algorithm and system co-design for efficient AIGC. Expected Graduation: Jan 2025

The University of Hong Kong (HKU)

Hong Kong, China

Email: cjs1020440147@icloud.com;

Research Assistance - Computer Science

April 2023 - April 2024

Research Interests: visual AIGC, Large Language Model, Navigation and autonomous driving

Dalian University of Technology

Dalian, China Sep. 2017 – July 2021

Bachelor - Mechanical Engineering

#### **PUBLICATIONS**

• SANA-Sprint: One-Step Diffusion with Continuous-Time Consistency Distillation:

Junsong Chen\*, Shuchen Xue\*, Yuyang Zhao, Jincheng Yu, Sayak Paul, Junyu Chen, Han Cai, Enze Xie†, Song Han In Submission. Paper | Page | GitHub

• SANA: Efficient High-Resolution Image Synthesis with Linear Diffusion Transformer:

Enze Xie\*, **Junsong Chen**\*, Junyu Chen, Han Cai, Haotian Tang, Yujun Lin, Zhekai Zhang, Muyang Li, Ligeng Zhu, Yao Lu, Song Han

Oral, ICLR 2025. Paper | Page | GitHub

• PixArt-Σ: Weak-to-Strong Training of Diffusion Transformer for 4K Text-to-Image Generation:

**Junsong Chen\***, Chongjian Ge\*, Enze Xie\*†, Yue Wu\*, Lewei Yao, Xiaozhe Ren, Zhongdao Wang, Ping Luo, Huchuan Lu, Zhenguo Li

ECCV 2024. Paper | Page | GitHub

• PixArt-α: Fast Training of Diffusion Transformer for Photorealistic Text-to-Image Synthesis:

**Junsong Chen\***, Jincheng Yu\*, Chongjian Ge\*, Lewei Yao\*, Enze Xie†, Yue Wu, Zhongdao Wang, James Kwok, Ping Luo, Huchuan Lu, Zhenguo Li

Spotlight, ICLR 2024. Paper | Page | GitHub

• MetaBEV: Solving Sensor Failures for BEV Detection and Map Segmentation:

Chongjian Ge\*, Junsong Chen\*, Enze Xie\*, Lanqing Hong, Zhongdao Wang, huchuan Lu, Ping Luo ICCV 2023. Paper | Page | GitHub

• ARKitTrack: A New Diverse Dataset for Tracking Using Mobile RGB-D Data:

Haojie Zhao\*, Junsong Chen\*, Lijun Wang, Huchuan Lu

 $\mathbf{CVPR}$ 2023. Paper | Page | GitHub

## Honors and Awards

- Outstanding graduates of the Province, 2020-2021
- National scholarship, 2018-2019
- 9k GitHub Stars, 2023-2025

#### EXPERIENCE

#### **NVIDIA** Research

Beijing, China

Research Intern

May. 2024 - Present

- Work Duty: Conduct researches related to Image/Video AIGC foundation model and Large language model (LLM).
- **Project Details**: I am currently learning and working on efficient AI Systems & Algorithm co-design on both training and inference.

# The University of Hong Kong (HKU)

Hong Kong, China

Research Assistant

Nov. 2022 - April. 2024

- Work Duty: Conduct researches related to 2D/3D AIGC foundation model and Large language model (LLM).
- Project Details: I am currently working on efficient training of the Text-to-Image foundation model.

#### Academic Service

• Conference Review: Neurips, ICML, ICLR

SKILLS

Programming Languages: Python, CUDA