

Sukjun (June) Hwang

CONTACT INFORMATION

✉ **E-mail:** sukjunh@cs.cmu.edu

🏠 <https://sukjunhwang.github.io>

🐙 **GitHub:** <https://github.com/sukjunhwang>

🐦 **Twitter**

RESEARCH INTERESTS

Dynamic Architectures / Sequence Modeling
Multi-modal Architectures / Video Understanding

EDUCATION

PhD in Machine Learning, **Carnegie Mellon University**, Pittsburgh Aug 2023 - Current
Advisor: **Prof. Albert Gu**
Building dynamic architectures for foundation models

MS in Computer Science, **Yonsei University**, Seoul, Korea Sep 2020 - Aug 2022
Advisor: **Prof. Seon Joo Kim**
Thesis: “To the Better Understanding of Entities in Images and Videos”
Collaborations with **Seoung Wug Oh**, **Joon-Young Lee**

BS in Computer Science, **Yonsei University**, Seoul, Korea Mar 2014 - Aug 2020
Summa Cum Laude – Ranked **Top 1** in Dept. of Computer Science
2 years of absence due to obligatory military service (2016 - 2018)

WORK EXPERIENCE

Cartesia AI ML Research (Part-Time) Jan 2026 - Current

Adobe Research Research Intern May 2022 - Aug 2022
- Media Intelligence Lab / Mentors: **Jason Kuen**, **Jianming Zhang**, **Brian Price**, **Zhe Lin**
- Unified model & framework for multi-task predictions

Qualcomm AI Research Research Intern Sep 2019 - Mar 2020
- Autonomous Driving Team / Mentor: **Kang Kim**
- Network pruning for CES 2020 Autonomous Driving Demo
- Developed user-interactive mask annotation tool

PUBLICATIONS

📖 **Google Scholar** (* Indicates equal contribution)

- CONFERENCE

Arnav Shah, Junzhe Li, Parsa Idehpour, Adibvafa Fallahpour, Brandon Wang, **Sukjun Hwang**, Bo Wang, Patrick D Hsu, Hani Goodarzi, Albert Gu, “**dnaHNet: A Scalable and Hierarchical Foundation Model for Genomic Sequence Learning**”. In **ICML (Spotlight)**. 2026.

Sukjun Hwang, Brandon Wang, Albert Gu, “**Dynamic Chunking for End-to-End Hierarchical Sequence Modeling**”. In **ICLR**. 2026.

Jeongseok Hyun, **Sukjun Hwang**, Su Ho Han, Taeoh Kim, Inwoong Lee, Dongyoon Wee, Joon-Young Lee, Seon Joo Kim, Minho Shim, “**Multi-Granular Spatio-Temporal Token Merging for Training-Free Acceleration of Video LLMs**”. In **ICCV**. 2025.

Sukjun Hwang*, Aakash Lahoti*, Tri Dao, Albert Gu, “**Hydra: Bidirectional State Space Models Through Generalized Matrix Mixers**”. In **NeurIPS**. 2024.

Hanjung Kim, Jaehyun Kang, Miran Heo, **Sukjun Hwang**, Seoung Wug Oh, Seon Joo Kim, “**VIS-AGE: Video Instance Segmentation with Appearance-Guided Enhancement**”. In **ECCV**. 2024.

	Miran Heo, Sukjun Hwang , Jeongseok Hyun, Hanjung Kim, Seoung Wug Oh, Joon-Young Lee, Seon Joo Kim, “ A Generalized Framework for Video Instance Segmentation ”. In <i>CVPR</i> . 2023.	
	Miran Heo*, Sukjun Hwang* , Seoung Wug Oh, Joon-Young Lee, Seon Joo Kim, “ VITA: Video Instance Segmentation via Object Token Association ”. In <i>NeurIPS</i> . 2022.	
	Sukjun Hwang , Miran Heo, Seoung Wug Oh, Seon Joo Kim, “ Cannot See the Forest for the Trees: Aggregating Multiple Viewpoints to Better Classify Objects in Videos ”. In <i>CVPR</i> . 2022.	
	Su Ho Han, Sukjun Hwang , Seoung Wug Oh, Yeonchool Park, Hyunwoo Kim, Min-Jung Kim, Seon Joo Kim, “ VISOLO: Grid-Based Space-Time Aggregation for Efficient Online Video Instance Segmentation ”. In <i>CVPR (Oral)</i> . 2022.	
	Sukjun Hwang , Seoung Wug Oh, Seon Joo Kim, “ Single-shot Path Integrated Panoptic Segmentation ”. In <i>WACV</i> . 2022.	
	Sukjun Hwang , Miran Heo, Seoung Wug Oh, Seon Joo Kim, “ Video Instance Segmentation using Inter-Frame Communication Transformers ”. In <i>NeurIPS</i> . 2021.	
- WORKSHOP	Miran Heo*, Sukjun Hwang* , Min-Hung Chen, Yu-Chiang Frank Wang, Albert Gu, Seon Joo Kim, Ryo Hachiuma, “ Autoregressive Universal Video Segmentation Model ”. In <i>CVPRW</i> 2026.	
	Sukjun Hwang* , Miran Heo*, Seoung Wug Oh, Joon-Young Lee, Seon Joo Kim, “ Direct Association of Object Queries for Video Instance Segmentation ”. In <i>CVPRW (Oral)</i> - The 4th Large-scale Video Object Segmentation Challenge Workshop. 2022.	
	Miran Heo, Sukjun Hwang , Seoung Wug Oh, Joon-Young Lee, Seon Joo Kim, “ Integrating Pose and Mask Predictions for Multi-person in Videos ”. In <i>CVPRW</i> - Efficient Deep Learning for Computer Vision Workshop. 2022.	
AWARDS AND HONORS	Jane Street Fellowship Finalist	Mar 2026
	Outstanding Reviewer Award , CVPR 2022	Jun 2022
	3rd Place Award, CVPRW 2022 YouTube-VIS Challenge Track 2	Jun 2022
	Summa Cum Laude (Ranked Top 1 in Dept. of CS), Yonsei University	Aug 2020
TEACHING EXPERIENCE	TA - Probabilistic Graphical Models (CMU) TA - Oriented Programming (Yonsei Univ) Tutor - Operating System & System Programming (Yonsei Univ), Best Tutor Award	
ACADEMIC SERVICES	Reviewer of NeurIPS, ICLR, ICML, CVPR, ICCV, ECCV	
MILITARY SERVICE	US 8th Army , Camp Humphreys, Korea (<i>KATUSA – Korean Augmentation To the United States Army</i>) - Sergeant (E-5), Squad Leader 2nd place of Toughest Talon challenge	Aug 2016 - Apr 2018
TALKS	Massachusetts Institute of Technology. H-Net	Mar 2026
	Carnegie Mellon University. H-Net	Nov/Dec 2025
	Yonsei University. H-Net	Nov 2025
	Microsoft Research NYC. H-Net	Sep 2025
	DatologyAI. H-Net	Sep 2025
	Seoul National University VITA - NeurIPS 2022 paper	Oct 2022
	VESSL AI. VITA - NeurIPS 2022 paper	Oct 2022

YouTube-VOS Challenge Track 2. 3rd place solution - CVPRW 2022 paper
WACV. SPINet - WACV 2022 paper
42dot. IFC - NeurIPS 2021 paper

Jun 2022
Jan 2022
Sep 2021