

KANCHANA RANASINGHE

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EDUCATION

Stony Brook University, NY, USA <i>PhD in Computer Science; GPA: 3.94 / 4.00</i>	Aug 2021 - Present
University of Moratuwa, Sri Lanka <i>BSc in Engineering; GPA: 3.95/4.20; Awarded Most Outstanding Graduant of the Year</i>	Dec 2015 - Jan 2020

RESEARCH EXPERIENCE

Meta, NYC, USA - <i>Research Scientist Intern</i> <ul style="list-style-type: none">• Spatial reasoning in multi-modal large language models• Motion awareness in video-language models	May 2023 - Aug 2023
Apple, Cupertino, USA - <i>Machine Learning Research Intern</i> <ul style="list-style-type: none">• Multi-modal self-supervised representation learning (ICCV '23)• Interpretability and robustness of vision language models	May 2022 - Sep 2022
MBZUAI, Abu Dhabi, UAE - <i>Research Assistant</i> <ul style="list-style-type: none">• Representation learning: contrastive losses, self-supervised video analysis (ICCV '21, CVPR '22)• Interpretability, robustness, and adversarial attacks for vision transformers (NeurIPS '21, ICLR '22)• Generative modelling for multi-modal output spaces (ICLR '21)	Nov 2020 - Aug 2021
VeracityAI, Colombo, Sri Lanka <i>Machine Learning Engineer</i> <i>Associate Data Scientist</i> <ul style="list-style-type: none">• Leading team of three associate data scientists for vehicle damage detection project	Feb 2020 - Oct 2020 Jan 2019 - Jan 2020
FiveAI, Cambridge, UK - <i>Research Intern</i> <ul style="list-style-type: none">• Perception team of self-driving startup• 3D orientation estimation: improve occluded object handling in videos with synthetic data	June 2018 - Dec 2018

SELECTED PUBLICATIONS

Language-based Action Concept Spaces Improve Video SSL Kanchana Ranasinghe, Michael Ryoo	NeurIPS, 2023
Perceptual Grouping in Contrastive Vision-Language Models K Ranasinghe, B McKinzie, S Ravi, Y Yang, A Toshev, J Shlens	ICCV, 2023
Peekaboo: Text to Image Diffusion Models are Zero-Shot Segmentors Ryan Burgert, Kanchana Ranasinghe, Xiang Li, Michael Ryoo	CVPR workshop, 2023
Self-supervised Video Transformers K Ranasinghe, M Naseer, S Khan, F Khan, M Ryoo	CVPR, 2022 (oral)
On Improving Adversarial Transferability of Vision Transformers M Naseer, K Ranasinghe, S Khan, F Khan, F Porikli	ICLR, 2022 (spotlight)
Intriguing Properties of Vision Transformers M Naseer, K Ranasinghe, S Khan, M Hayat, F Khan, M Yang	NeurIPS, 2021 (spotlight)
Orthogonal Projection Loss K Ranasinghe, M Naseer, M Hayat, S Khan, F Khan	ICCV, 2021
Conditional Generative Modeling via Learning the Latent Space S. Ramasinghe, K Ranasinghe, Salman Khan, Nick Barnes, and Stephen Gould	ICLR, 2021

PROFESSIONAL ACTIVITIES

Conference Peer Reviewer: CVPR, ICCV, ECCV, NeurIPS, ICML, BMVC, ICRA	2020 - 2023
Mentoring: Undergraduates (University of Moratuwa) & Graduate Students (Stony Brook University)	2022 - 2023