

My fantastic Research Journey focused on

Selected into *the Joint Training Program for High School Students of University of Pennsylvania and RDFZ*

Completed course ENGR2900 Global Immersion: Artificial Intelligence and Robotics, Got
A+ (2023.12-2024.1.22-2024.5.31)

Project: *FILM and FIGURE SKATING*

Schedule	Module	Lecture Date	Lecture Topic	Other Activities	Assignment Due
	1	Monday January 22	Introduction		
		Wednesday January 24	Convolution		
	2	Monday January 29	CNN for object detection	Project 1 - Celebrity Facial Recognition Submission 1	
		Wednesday January 31	Coding help (recitation) - Python, PyTorch		
	3	Monday February 5	Pre-training networks on large datasets	Project 1 - Celebrity Facial Recognition Submission 2	
		Wednesday February 7	CNN/transformers pre-training		
	4	Monday February 12	Graph networks	INITIAL MTG W CHINESE STUDENTS	Project 1 - Celebrity Facial Recognition Submission 3
		Wednesday February 14	Image blending		
		Sunday February 18	SUNDAY CLASS LUNCH		
	5	Monday February 19	CNN architecture design		Project 2 - Body and Hand Pose Estimation Submission 1
		Wednesday February 21	Coding help (recitation)	Release guidelines for Final Project, teaching collaboration with high school students	Project 2 - Body and Hand Pose Estimation Submission 2
	6	Monday February 26	NeRFs		
		Wednesday February 28	Coding help (recitation)		
				Spring Break (March 2 - 10)	
	7	Monday March 11	Motion with CNN	Partner schools will join	Project 2 - Body and Hand Pose Estimation Submission 3
		Wednesday March 13	Motion and action		
	8	Monday March 18	GPT auto-regression		Project 3 - Language and Video Part 1 Submission 1
		Wednesday March 20	Coding help (recitation) / Guest Speaker 1		
	9	Monday March 25	Visual segmentation		Project 3 - Language and Video Part 1 Submission 2
		Wednesday March 27	Coding help (recitation) / Guest Speaker 2		
	10	Monday April 1	Visual correspondence		Project 3 - Language and Video Part 1 Submission 3
		Wednesday April 3	Coding help (recitation) / Guest Speaker 3		
	11	Monday April 8	Visual LLM		Project 4 - Language and Video Part 2 Submission 1
		Wednesday April 14	Coding help (recitation) / Guest Speaker 4		
	12	Monday April 15	Multi-modal (vision and sound)		Project 4 - Language and Video Part 2 Submission 2
		Wednesday April 17	Coding help (recitation) / Guest Speaker 5		
	13	Monday April 22	How to read and write a scientific paper		Project 4 - Language and Video Part 2 Submission 3
		Wednesday April 24	How to read and write a scientific paper		
	14	Monday April 29	TBD		
		Wednesday May 1	TBD		
	16	Thursday May 16	Depart for immersion trip to China		
		Thursday May 23	Final project presentations		
	Saturday May 25	Depart from China			
	Friday May 31				Final Project Submission 1, 2, 3 (TBD)

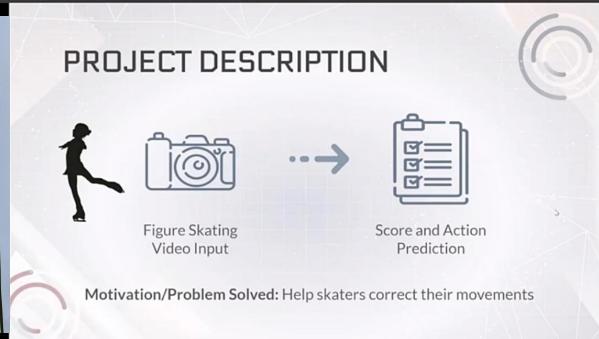
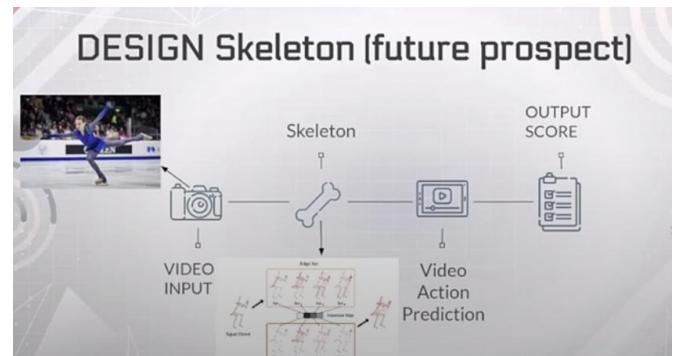
	Mon	Tue	Wed	Thur	Fri	Sat	Sun
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	31	Feb.1	2	3	4
Project 1 - Celebrity Facial Recognition	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
	19	20	21	22	23	24	25
Project 2 - Body and Hand Pose Estimation	26	27	28	29	Mar.1	2	3
	4	5	6	7	8	9	10
	Week 1	Week 1	Week 1	Week 1	Week 1	Week 1	Week 1
	11	12	13	14	15	16	17
	Week 2	Week 2	Week 2	Week 2	Week 2	Week 2	Week 2
	18	19	20	21	22	23	24
Project 3 - Language and Video Part 1	25	26	27	28	29	30	31
	Apr.1	Week 4	Coding Help	中期汇报	中期汇报		
	2	3	4	5	6	7	
	Visual Correspondence	Week 5	Coding Help	Tomb Sweeping			
	8	9	10	11	12	13	14
	Visual LLM	Mock	Coding Help	Mock			
Project 4 - Language and Video Part 2	15	16	17	18	19	20	21
	Week 6	Coding Help	研究与实现	研究与实现	研究与实现		
	22	23	24	25	26	27	28
	How to read and write a scientific paper	How to read and write a scientific paper	How to read and write a scientific paper	Week 6			
	29	30	May.1	2	3	4	5
	AL/IB Exams	AL/IB Exams	AL/IB Exams	AL/IB Exams	AL/IB Exams	AL/IB Exams	AL/IB Exams
	6	7	8	9	10	11	12
	AP/AL/IB Exams	AP/AL/IB Exams	AP/AL/IB Exams	AP/AL/IB Exams	AP/AL/IB Exams	AP/AL/IB Exams	AP/AL/IB Exams
	13	14	15	16	17	18	19
	AP/AL/IB Exams	AP/AL/IB Exams	AP/AL/IB Exams	AP/AL/IB Exams	AP/AL/IB Exams	AP/AL/IB Exams	AP/AL/IB Exams
	20	21	22	23	24	25	19
							Final project presentations



The Joint Training Program for High School Students of University of Pennsylvania and RDFZ Completed course ENGR2900 Global Immersion: Artificial Intelligence and Robotics, Got A+ (2024.1.22-5.31)



2024 Penn Global Seminar Artificial Intelligence and Robotics : My team, Mentor and Tutor
Project: **FILM and FIGURE SKATING** (2024.6)



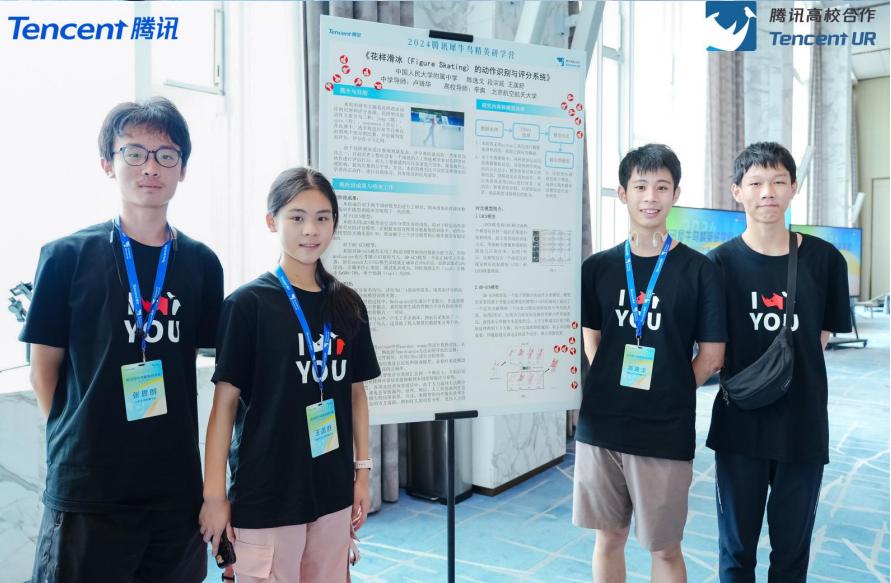
2024 Penn Global Seminar Artificial Intelligence and Robotics: Prize for The Best Demo (2024.6)

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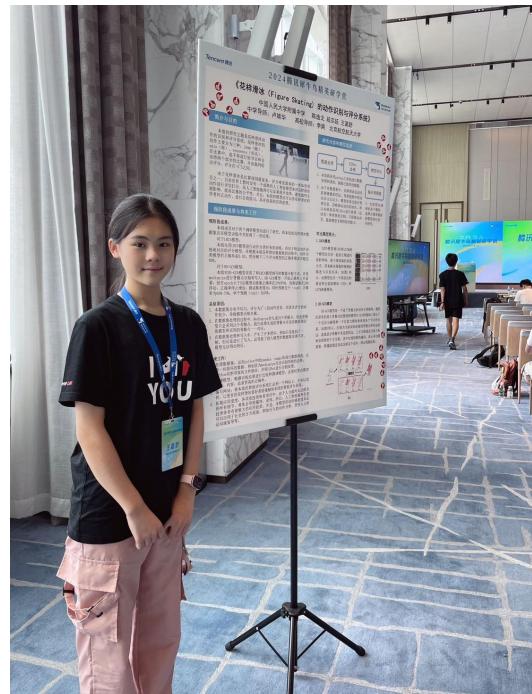
Selected into ***Tencent Rhino-Bird Middle school Science Research Training Program.***

National Science and Technology Top-notch Talent Training and Reserve
Fully funded by Tencent (2024.4-11) National

Project ***The Action Recognition and Scoring System of Figure Skating***



Project *The Action Recognition and Scoring System of Figure Skating* was selected into the scientific research project of 2024 *Rhino-Bird Middle school Science Research Training Program*. (2024.5-2024.11) Top2 The Best Project Poster



Team selected into **Tencent Rhino-Bird Elite Research Camp** (Tencent fully sponsors) (AUGUST 2024)



Team work: Learning, Discussion and Training **Mixed Element Models**

Tencent 腾讯

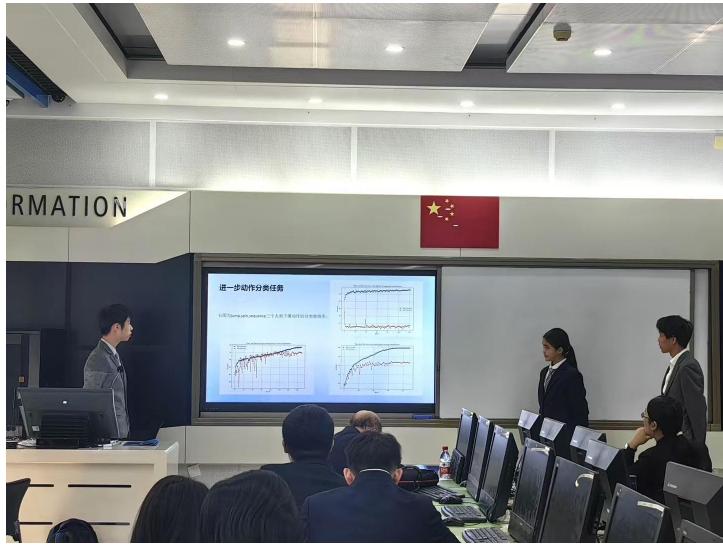


The exiting moment of completion: Training models late into the night @Tencent Rhino-Bird Elite Research Camp
Together with the Rhino-Bird Elite, Undergraduates and Graduate Students from various universities

My fantastic Research Journey focused on

Selected into *the Beijing Soaring Talent Program* (2024.8-10) *Regional*
The Best Paper Presenter

Paper published in *the Beijing Youth Soaring Science Forum* (in the field of mathematics and information science).



The Beijing Soaring Talent Program (2024.8-10) Regional

Paper published in **the Beijing Youth Soaring Science Forum** (in the field of mathematics and information science).
The Best Paper Presenter

My fantastic Research Journey focused on

The Best Research Project 2024

Beijing Youth Top-notch Innovative Talent Training Program

Regional

Posted on the closing ceremony of *the Beijing Science Festival for Primary and Secondary School Students 2024.12*



The Best Research Project 2024---Beijing Youth Top-notch Innovative Talent Training Program
--- Posted on the closing ceremony of the Beijing Science Festival for Primary and Secondary School Students