Chenyang Zhao

zhaochenyang20@gmail.com ◇ Blog

EDUCATION EXPERIENCE

Department of Computer Science and Technology, Tsinghua University 2020.09 - Present

Bachelor's degree in progress

· **Academic performance: GPA 3.95/4.00, rank 8/182**

· **Language Proficiency: CET-4 649/710**

RESEARCH EXPERIENCE

Large Scale Language Model Pre-training Group at SenseTime 2022.04 - Present

Internship in Natural Language Processing

· Focus on Few-Shot In-Context Learning, Model Security and Chain of Thought Instruction Finetune

DISCOVER Research Group, Institute of Intelligent Industry, Tsinghua University 2021.09 - 2022.04

Internship in Computer Vision

· Top 10 of over 200 units worldwide in the 2nd Jittor Artificial Intelligence Challenge

PROJECT EXPERIENCE

Sabor Requirements Tracking Management System 2022.03 - 2022.07

Project Leader

· Related project at finished product show and concept promo

TsingAnswer Platform 2021.01 - present

Project Leader

· Attract more than 3,000 users, and the average daily visits during the semester is more than 20,000

SOCIAL WORK

Tsinghua University Computer Science and Technology Association 2021.06 - present

General Chairman

· Leader of Summer 2022 Training & Python Data Analysis Course Instructor & DOCS-9 Writer

Tsinghua University Academic Development Center QA Workshop 2022.02 - present

Technical Team Chairman

Tsinghua University Curriculum Advisory Committee 2021.09 - present

Executive member

HONORS

SenseTime Scholarship Most Promising Award Fall 2022

Tsinghua University Comprehensive Merit Scholarship Fall 2022

Tsinghua University Comprehensive Merit Scholarship Fall 2021

TSINGHUA UNIVERSITY
ACADEMIC TRANSCRIPT

Student Name Zhao Chenyang

Gender Male **Student No.** 2020012363 **Student Type** Undergraduate **Date of Admission** September,2020

School/Department Department of Computer Science and Technology **Major** Computer Science and Technology

Course Number	Course Title	Credit	Grade	Point	Year-Semester
10421055	Calculus A(1)	5	A-	4.0	2020-Autumn
10421324	Linear Algebra	4	A	4.0	2020-Autumn
10610183	Ideological Moral and Legal Education	3	A-	4.0	2020-Autumn
10680011	Situation and Policy	1	A-	4.0	2020-Autumn
10691342	Writing and Communication	2	A-	4.0	2020-Autumn
10720011	Physical Education(1)	1	A-	4.0	2020-Autumn
12090052	Military Theory	2	A-	4.0	2020-Autumn
14201092	English for Academic Purposes (A): Spoken Communication	2	A-	4.0	2020-Autumn
24100023	Discrete Mathematics(1)	3	A-	4.0	2020-Autumn
30210041	Introduction to Information Science and Technology	1	B+	3.6	2020-Autumn
30240233	Fundamentals of Programming	3	A-	4.0	2020-Autumn
00701582	InitiationLove, Marriage and Psychology	2	A+	4.0	2021-Spring
10421065	Calculus A(2)	5	A-	4.0	2021-Spring
10421392	Advanced Topics in Linear Algebra (English)	2	A	4.0	2021-Spring
10610193	Outline of Modern Chinese History	3	A	4.0	2021-Spring
10680042	Introduction to Mao Zetong Thought and Socialism with Chinese Characteristics (2)	2	P	N/A	2021-Spring
10720021	Physical Education(2)	1	B	3.3	2021-Spring
14201082	English for Academic Purposes (A): Research Paper Writing	2	A-	4.0	2021-Spring
24100013	Discrete Mathematics(2)	3	A-	4.0	2021-Spring
30240532	Foundation of Object-Oriented Programming	2	A+	4.0	2021-Spring
10430484	Physics for Scientists and Engineers B(1)	4	W	N/A	2021-Spring
12090062	Military Skills	2	B+	3.6	2021-Summer
30240522	Programing and Training	2	A-	4.0	2021-Summer
00781882	Music Phenomena in The Multi-Culture	2	A-	4.0	2021-Autumn
10420252	Introduction to Complex Analysis	2	A+	4.0	2021-Autumn
10430494	Physics for Scientists and Engineers B(2)	4	A-	4.0	2021-Autumn
10610204	Principle of Marxist Philosophy	4	A	4.0	2021-Autumn
10720031	Physical Education(3)	1	A	4.0	2021-Autumn
20240103	Assembly Language Programming	3	A-	4.0	2021-Autumn
30240184	Data Structures	4	B	3.3	2021-Autumn
40240432	Formal Languages and Automata	2	W	N/A	2021-Autumn
10420803	Probability and Statistics	3	P	N/A	2022-Spring
10680022	Introduction to Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era	2	A-	4.0	2022-Spring
10680032	Introduction to Mao Zedong Thoughts and Theoretical System of Socialism with Chinese Characteristic	2	A-	4.0	2022-Spring
10720041	Physical Education(4)	1	A	4.0	2022-Spring
14204222	Word Power Made Easy	2	A-	4.0	2022-Spring
30240042	Introduction to Artificial Intelligence	2	A	4.0	2022-Spring
30240163	Software Engineering	3	A	4.0	2022-Spring
30240343	Digital Logic Circuit	3	P	N/A	2022-Spring
30240551	Digital Logic Experimentation	1	A-	4.0	2022-Spring
40240422	Fundamentals of Computer Graphics	2	A	4.0	2022-Spring
40240912	Theory and Practice of Human Computer Interaction	2	A-	4.0	2022-Spring

Total Credits: 102.0 **GPA:** 3.95 **Date of Graduation:** ********** **Degree Conferred:** *******

Director of Registrar's Office: 尹佳

Official Seal:

Date Printed: December 9, 2022

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TSINGHUA UNIVERSITY
ACADEMIC TRANSCRIPT

Student Name Zhao Chenyang

Gender Male **Student No.** 2020012363 **Student Type** Undergraduate **Date of Admission** September,2020

School/Department Department of Computer Science and Technology **Major** Computer Science and Technology

Course Number	Course Title	Credit	Grade	Point	Year-Semester
42540023	Students Research Training	3	A	4.0	2022-Spring
40240963	Topics in Quantum Computing	3	A-	4.0	2022-Summer
00701702	Major Issues in the Contemporary World Politics	2	W	N/A	2022-Summer
	**********				

Total Credits: 102.0 **GPA:** 3.95 **Date of Graduation:** ********** **Degree Conferred:** *******

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KEY TO TRANSCRIPT

I. COURSE NUMBERING SYSTEM

Each course number consists of 8-10 characters.

The first character indicates the course level:

0-4 or H-T, W = undergraduate courses

6-9, A-G or X-Z = graduate courses

II. CREDIT

Credit is reported in terms of semester hours, whether earned during a 16-week semester or a summer session. For 1 unit of credit, either one hour per week is allotted to lecture or discussion, or two hours per week are allotted to laboratory, while more hours are needed for preparation or subsequent reading and study.

III. THE RECORD ENDS WITH **********.

IV. DATE OF GRADUATION and DEGREE CONFERRED

For currently enrolled undergraduates, the columns of DATE OF GRADUATION and DEGREE CONFERRED are **********.

V. GRADING SYSTEMS

a) EFFECTIVE for students who matriculated in spring 2015 and after

(i) Tsinghua University converted to a LETTER GRADING SYSTEM. The table below shows the grades in detail.

(ii) Credits are given for A+, A, A-, B+, B, B-, C+, C, C-, D+, D, P and EX.

(iii) W: Withdrew.

(iv) I: Incomplete. Marked when a student's application is approved for not attending the final exam.

(v) EX: Exemption. Students receive credits for exempted courses.

Grade	Grade Points	Corresponding 100-point Range	Equivalent 100-point value*
A+	4.0	95-100	100
A			98
A-		90-94	92
B+	3.6	85-89	87
B	3.3	80-84	82
B-	3.0	77-79	78
C+	2.6	73-76	75
C	2.3	70-72	71
C-	2.0	67-69	68
D+	1.6	63-66	65
D	1.3	60-62	61
F	0	0-59	0
P	N/A	N/A	N/A
F	N/A	N/A	N/A

* For the transition period in 2015-2018 between the 100-point grading system and the letter grading system, Tsinghua has provided a corresponding average of values in the 100-point range of each grade. The equivalent 100-point value for course receiving credits corresponds to the median in the range. Students who matriculated in spring 2019 and after no longer use the equivalent 100-point value.

b) EFFECTIVE for students who matriculated prior to spring 2015

(i) 100-POINT GRADING SYSTEM: Credits are given for 60 points and above.

(ii) PASS/FAIL SYSTEM: Credits are given for PASS.
DISTINCTION (for undergraduates only): Credits are given for DISTINCTION.

(iii) REPEATED COURSES: The transcript displays only the latest result of a repeated course. Repeated courses are designated with an "Rn" code beside the final grade, where "n" indicates the number of times the course was repeated.

VI. GRADING POLICY REFORM 2015-2018

In the ten years prior to spring 2015, 30 percent of A-range grades have been given. From fall 2015, Tsinghua initiated a grading reform: A-range grades (A+, A, A-) were to account for 20 percent of the grades given in all courses. In Spring 2019, the faculty reaffirmed its commitment to fair and transparent assessment and removed its numeric target for the percent of A-range grades.

VII. GPA CALCULATION

$$\text{GPA} = \frac{\sum \text{Course Credit} * \text{Grade Point}}{\sum \text{Course Credit}}$$

GPA is shown for students who matriculated in spring 2015 and after in a 4.0 grading scale. Course grades with N/A (Not Applicable) should not be included in GPA calculation.

清華大學 计算机科学与技术系
Department of Computer Science and Technology, Tsinghua University

Room 4-504, FIT Building
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December 14, 2022

Recommendation Letter for Chenyang Zhao

To Whom It May Concern:

I am Minlie Huang, an Associate Professor in the Computer Science and Technology Department at Tsinghua University. I am writing to highly recommend Chenyang Zhao for a summer research opportunity in your research group. Chenyang is an exceptional student who demonstrated his potential through hard work and dedication.

Chenyang has excellent academic performance. He took my **Object-Oriented Programming Fundamentals** in his first year and performed extraordinarily well with full marks, despite the challenging workload for a freshman student. Moreover, during our after-class discussions, I found that he wrote detailed course notes for all 14 sections and open-sourced them to the Computer Skills Guide Document of Tsinghua University, where they received high appreciation. In his junior year, Chenyang took my **Artificial Neural Networks**. Again, he demonstrated a keen interest in deep learning and excelled at my course assignments.

In addition to his impressive academic performance, Chenyang has demonstrated a strong research interest and exploring spirit, particularly in in-context learning and the security of large-scale language models. He has been concentrating on the Teacher LM, a generalized reasoning model, for his final project in my Artificial Neural Networks class. I frequently notice him engaging graduate students in in-depth discussions regarding the difficulties he overcame in my lab. This project further explores the reasoning ability and interpretability of large-scale language models, and I eagerly await his achievements.

In conclusion, I highly recommend Chenyang for your summer research opportunity. His impressive academic performance, strong interest in research, and down-to-earth dedication to his work make him an outstanding candidate. If you have any further questions concerning Chenyang's application, please do not hesitate to contact me.

Sincerely yours,

Minlie Huang, Associate Professor
Department of Computer Science and Technology
Email: aihuang@tsinghua.edu.cn
Phone: (86) 10 - 6277 - 7699
Web: http://coai.cs.tsinghua.edu.cn/hml

No.58 Northwest 4th Ring Road
SenseTime Research,
Beijing, P. R. China, 100080

December 14, 2022

Recommendation Letter for Chenyang Zhao

To Whom It May Concern:

I am Mingjie Zhan, the research leader of the pre-trained language model group at SenseTime Research. I am pleased to recommend our research intern, Chenyang Zhao, for the summer research opportunity in your research team. Chenyang has been working on In-Context Learning and Instruction Finetune since the summer of 2022 and has demonstrated excellent research skills and great potential in this field.

Chenyang has a strong background in deep learning and a talent for quickly learning new concepts and technologies. In the spring of 2022, he led his team to finish in the top 10 of over 200 units worldwide in the 2nd Jittor Artificial Intelligence Challenge. In this competition, he learned the Jittor framework within two weeks, achieving outstanding results. After joining our group, he quickly became proficient in the In-Context Learning and Chain of Thought field. He read over more than 40 essential papers, taking detailed notes and raising valuable questions along the way, demonstrating his critical thinking abilities and research-oriented mindset.

His strong engineering abilities and rigorous work ethic made him well-suited for NLP research, and he made great contributions to our research on the first Generalized Reasoning Model, the Teacher LM. Our work trained the first large-scale language model dedicated to generative reasoning. We utilise the reasoning ability of our model to generate reasoning to existing datasets, resulting in data augmentation. After finetuning on these augmented datasets, other language models perform better on unseen tasks. Chenyang primarily performed the downstream model validation experiment in this process, comparing the effects of finetuning various models on datasets augmented by the Teacher LM. His experiment results showed that the quality of reasoning generated by the Teacher LM exceeds that of the original manual annotations. Our work is currently being submitted to ICML 2023, and Chenyang is a co-first author.

Chenyang's strong learning ability, critical thinking skills, and understanding of research trends make him a valuable addition to any research team. In addition, his meticulous and rigorous work ethic is unmatched. He would make a valuable contribution to your research team, and I highly recommend him for your summer research opportunity. If you have any further questions about him, please do not hesitate to contact me.

Sincerely yours,

Mingjie Zhan

Mingjie Zhan, Research Scientist
SenseTime Research
Email: zhanmingjie@sensetime.com

清華大學 计算机科学与技术系
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December 10, 2022

Recommendation Letter for Chenyang Zhao

To Whom It May Concern:

This is Chun Yu, an Associate Professor in the Department of Computer Science and Technology at Tsinghua University. With pleasure, I am writing this letter of recommendation for Chenyang Zhao, who attended my senior undergraduate course, **Theory and Practice of Human-Computer Interaction**, in the Spring semester of 2022.

Chenyang impressed me with his excellent leadership, collaboration, and professional abilities. In my class, he led a team of 4 students to design a project on intelligent adaptive headphones. They used the underlying communication interface of the Android system to transmit real-time signals and then input the collected user samples into a small-scale neural network to learn users' habits and realize rich user adaptive functions. Chenyang guided his team to achieve adaptive volume adjustment for headphones in two weeks using triple-ended communication.

Chenyang has demonstrated his organizational abilities in various on-campus events. As the project designer, he led the construction of the platform for Tsinghua University's Student Academic Development Association, which is currently used by over 3,000 people daily. In his junior year, as the vice president of the Student Association for Science and Technology at Tsinghua University, Chenyang organized a summer training program at our department, leading 12 peers and individually lecturing the Python and Data Analyses courses. This program popularized Python, Linux, Pytorch, Data Analyses, and other computer skills with praise in over ten sessions, attracting more than 1,000 participants.

Chenyang has had the most outstanding organizational abilities since I joined Tsinghua University as an Associate Professor. I am confident that he will excel in your research team and carry out significant work in the future. For any further information regarding Chenyang's application, please do not hesitate to contact me.

Sincerely yours,

Chun Yu

Chun Yu, Associate Professor
Department of Computer Science and Technology
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