

Northwestern | THE GRADUATE SCHOOL

Application for Admission

App Type **New Student** Submitted Date **11-29-2018** App ID# **79313030**

Intended **Full-time** Entry **Fall 2019** Prior TGS
Status Quarter Applicant
(Program)

Last Name **Zhu** First **Zixuan** Middle

Gender Pronouns (US only) Birthdate **01-03-1997** Gender **Female**

Program **Computer Science: MS** Secondary PhD
Specialization/Area of Interest **Artificial Intelligence and Machine Learning** (MEAS Only)
Cluster MS Consideration
(MEAS Only)

JD/PhD **No** DPT/PhD **No** Fee Waiver US Vet/Active Forces

Ethnicity **Asian** Hispanic **No**

Citizenship **CHINA** Visa

Citizenship Status **International Student**

Country of Birth **CHINA** Green Card #

Current Address Permanent Address
Room 602, Building No.8
No.5 Yulan Road, Yuhuatai Dist
Nanjing, 210000
CHINA

Current Phone Permanent Phone
Cell Phone **+86 15305198628** Preferred Phone **Cell Phone Number**
Number

Email Address **zixuanzhu0103@gmail.com**

Previous Institution	From	To	Field of Study	Level	Degree	Date
Zhejiang University	09-01-2015	07-01-2019	Computer Science		International Undergraduate Degree	

Cumulative UG GPA	3.87	UG Junior/Senior Year GPA	3.86
Cumulative UG GPA - Unconverted		Max UG GPA Scale	
Cumulative Grad GPA	3.87		
Cumulative Grad GPA - Unconverted		Max Grad GPA Scale	

Letters of Recommendation

- | | |
|-------------------------|--|
| 1. Yunjun Gao | gaoyj@zju.edu.cn |
| 2. Jeffrey Zhang | jinming.zhang@morganstanley.com |
| 3. Wenzhong HE | donhwz@zju.edu.cn |
| 4. | |
| 5. | |
-

Are you interested in studying with specific faculty members? (List names below)

- | | |
|-------------------------------|---------------------------|
| 1. First Name Larry | Last Name Birnbaum |
| 2. First Name Douglas | Last Name Downey |
| 3. First Name Ken | Last Name Forbus |
| 4. First Name Kristian | Last Name Hammond |
-

Please indicate the highest level of education completed by your parent(s) or guardian(s) (the one or two people most responsible for raising you)

First individual's highest level of education completed: **Associate's degree or equivalent**

If other, please explain:

Second individual's highest level of education completed: **Bachelor's degree or equivalent**

If other, please explain:

Language

Reading

Writing

Speaking

Self-Reported Test Scores

GRE Gen **09-23-2017** Verbal **157** **76** Quant **170** **96** A.W. **3.5** **41**

GRE Sub LSAT

TOEFL **10-28-2018** Ovr **104** Read **25** List **29** Speak **23** Writ **27** IELTS Ovr

GMAT Tot Verb Quant A.W. I.R.

MCAT Bioscience Verbal Physical Science

Please list any honors you have been awarded

Merit Scholarship, ZJU, 2015-2018;

CKC Outstanding Student Scholarship, ZJU, 2015-2018;

Three-good Student Scholarship, ZJU, 2015-2018;

2012 NOIP [National Olympiad in Informatics in Provinces] Advanced, First Prize, 11/2012

Have you applied for or been awarded an external fellowship?

Yes ☐ No ☒ If yes, please specify;

Please describe your plans for the future.

Find a job in the computer science industry.

Other Universities Applied (in preferred rank order)

1. School Drop Down **Carnegie Mellon**

5. School "other"

2. School Drop Down **Columbia University**

6. School "other"

3. School Drop Down **Cornell University**

7. School "other"

4. School Drop Down **Brown University**

8. School "other"

Johns Hopkins University

Academic misconduct? Yes ☐ No ☒ Convicted of crime? Yes ☐ No ☒

If answered yes, applicant is asked to upload explanation. If uploaded, explanation will be attached to end of application PDF.

Ever since primary school, as a girl who is into computer programming, I've been on the receiving end of many odd stares and prejudicial comments. It was always crystal clear to me that I was in the minority. But I never let this get me down; on the contrary, I took it as a source of pride. When I was the only girl in my primary school's computer programming interest class, or when I was referred to as "the girl on the computer programming team," I was delighted. It made me feel special, and was a big boost to my self-esteem. That said, the pride that came from my skill with a computer was not based merely on my minority status. Regardless of gender, I was a precocious young coder, programming in Basic at the tender age of ten, and progressed to writing advanced computer algorithms in Pascal by the time I was in middle school. I have become accustomed to being among the top performers in computer science classes and competitions, and it was clear to me that I had what it takes to survive and thrive in computer science.

As a freshman in high school, I won the Advanced Group First Prize in National Olympiad in Informatics in Provinces (China's version of the International Olympiad in Informatics). Not only was this the highest award earned by a student at my high school that year, it was the highest award earned in the NOI contest by a freshman in my school's history.

My devotion to computer science and years of practice landed me at Zhejiang University, home to one of the best computer science departments in China. As one of the top schools in China, Zhejiang University maintains high standards, especially in the computer science department, where the faculty does not dish out top grades lightly. However, thanks to my lifelong passion in the subject and years of practice, I did not have trouble earning mostly A's, and have maintained a grade point average of 3.9 in my first three years of college.

Outside of class, I took the initiative to utilize my training in computer science to bring about real-world impact. Inspired by recommendation systems from online shopping websites, I began a fruitful collaboration with the Registrar's Office of CKC Honors College to build a mobile web application that recommends fields of study to incoming students based on their interests and talents. The website received thousands of hits by nearly every freshman on campus within a week of its release, reaping consistent praise, and is still in widespread use today. Encouraged by the success, I embarked on another project as part of the Student Research Training Program. Using the API's provided by Google Translate, I developed an Android app that translates academic articles from English to Chinese. Having finished the app well ahead of the three-month deadline, I used the remaining time to add additional functionalities such as a field-specific dictionary and an example sentence generator by applying Hidden Markov models to Chinese word segmentation.

Motivated by the desire to further enlarge the impact of my computer science skills, I interned in the technology team at Morgan Stanley's Shanghai office. I was assigned to their Axiom group, where my task was to develop an automated software deployment tool. Though I had no previous experience with Axiom, a programming language actively used by an extremely small group of developers worldwide, I picked up the basic syntax quickly with the help from a senior software developer. By further digging into the existing code base for examples on my own, I soon gained a solid grasp of the architecture and workflow. In the end, combining the Shell command I learned from school, I delivered a configurable automated deployment tool with post-deployment validation functionality. This tool helped Morgan Stanley's software engineers improve deployment accuracy from 85% to 100% and speed up the development process. I will forever remember the immense sense of accomplishment that I felt when I pushed my final code into production and witnessed how it improved the company's efficiency. If I ever had any doubt that I was meant to be a computer scientist, that doubt was forever squelched. Looking back, I realize that this internship was one of the main sources of inspiration for my current decision to pursue higher education and professional development in the United States.

It seems that computer science is a male-dominated field, especially in China, where traditional gender roles are still prevalent. However, during my internship at Morgan Stanley, I was impressed by the professionalism exhibited by my female colleagues and the level of influence that they had under the firm's culture. The emphasis on diversity and gender equality strengthened my resolve to pursue higher education and professional career in the United States.

In my mind, college is not the end but the beginning of my education. I'm prepared to continue pursuing the frontiers of knowledge in my field, and that's why I choose to pursue a master's degree in computer science at one of the leading schools in the field. The Master of Science program in Computer Science at Northwestern has much to offer. I find the Project MS in particular to be a great fit for me. The flexibility in designing my own curriculum and the wealth of courses to choose from give me the chance to further my interest and skills in software engineering with the focus on natural language processing. The opportunity to complete a culminating project upon graduation allows me to practice my learnings in the master program, a perfect preparation for me to utilize my knowledge to solve problems and create real-world impact. Outside of the academic program, I'm also excited for the entrepreneurial and diverse Northwestern community. I look forward to working on interdisciplinary projects with students from Kellogg, Medill and Pritzker at the Farley Center and forging long-lasting friendship through GSA. I have no doubt that Northwestern could be the place where I embark on my professional career as a computer expert in an increasingly collaborative world.

浙江大学学生成绩一览表

登记号: 20183844

姓名: 朱梓媛	院系: 计算机科学与技术学院	出生地点: 江苏	专业: 计算机科学与技术+英语	学号: 3150105250
性别: 女	生日: 1997年01月03日	英语写作	入学日期: 2015年09月01日	学制: 4年
2015-2016学年				
第1学期课程	学分	成绩	当代语言学	3.0 86
军训	2.0	84	组织行为学	1.5 良好
西方音乐简史	1.5	92	英语辩论	1.5 82
公共经济学概论	1.5	86	桥牌(初级班)	1.0 92
无机化学	3.0	90	面向对象程序设计	2.5 82
无线电测向(初级班)	1.0	88	高级英汉互译	2.5 93
分析化学(I)	2.0	80	计算机组成	4.0 87
线性代数	2.5	75	高级数据结构与算法分析	4.5 89
微积分 I (H)	4.5	94	Python程序设计	4.0 88
程序设计基础	3.0	97	数据库系统	3.0 89
思想道德修养与法律基础	2.5	91	2017-2018学年	4.0 91
生命科学概论 I	3.0	81	第1学期课程	成绩
常微分方程	1.0	91	课程综合实践 II	2.5 88
微积分 II (H)	2.0	95	英语水平测试	1.0 合格
中西方哲学 I (H)	2.0	89	逻辑学 (H)	3.0 92
高级英语视听 II	1.0	87	操作系统	5.0 84
形势与政策 I	1.0	89	数值分析	3.0 78
英语口语	1.0	95	电子商务系统结构	2.5 90
定向越野(初级班)	1.0	90	智能终端软件开发	2.0 92
微积分 III (H)	1.5	92	计算理论	2.0 84
会计学	3.0	90	程序设计方法学	2.0 85
军事理论	1.5	89	第2学期课程	成绩
中西方哲学 II	2.0	81	服务科学导论	2.0 92
毕业最低学分应为: 140+25+4+5				
已获得分: 179.5				授予学位:
所有学年GPA: 3.87/4.0 (87.73/100)				



张光新

副教务长:

经办人: 张晶晶

签发时间: 2018年11月27日

记录成绩说明:
1. 百分制: 60分及以上为及格, 100分为满分;
2. 五级计分制: 优秀、良好、中等、及格、不及格;
3. 二级计分制: 合格、不合格;
4. 标注“-*”者为校外转入的课程;
5. 带“注”课程为必修课程, GPA按最高成绩计算

Zhejiang University

Registration No: 20183844

Student's Academic Records

Name: ZHU Zixuan	College/Dept.: College of Computer Science & Technology	Speciality: Computer Science and Technology + English Language and Literature	Student ID: 3150105250
Sex: Female	Birthdate: 01/03/1997	Birth Place: Jiangsu	Years of Program: 4Years
Academic Year 2015-2016			
Courses (1st Term)	*Cr	*Sc	
Military Training	2.0	84	
A CONCISE HISTORY OF WESTERN MUSIC	1.5	92	
Introduction to Public Economics	1.5	86	
Inorganic Chemistry	3.0	90	
Radio Direction Finding	1.0	88	
Analytical Chemistry (I)	2.0	80	
Linear Algebra	2.5	75	
Calculus I (H)	4.5	94	
Fundamentals of Programming	3.0	97	
Mental Education and Foundation of Law	2.5	91	
Overview of Life Science I	3.0	81	
Academic Year 2016-2017			
Courses (1st Term)	*Cr	*Sc	
Integrate Practice for Courses I	2.5	96	
Advanced Audio-Visual Course in English I	1.0	80	
Football (Basic Level)	1.0	74	
Fundamentals of Data Structures	2.5	88	
English Public Speaking	1.0	89	
English Writing I	1.5	92	
Intensive Readings of English Literary Classics	3.0	93	
History of World Civilization I (H)	3.0	82	
Discrete Mathematics	3.0	89	
Selected Readings of Chinese Literature Masterpiece (H)	3.0	88	
Introduction to Life Science (H)	3.0	80	
Integrated English II	3.0	86	
Digital Logic Design	4.0	88	
Probability and Mathematical Statistics	2.5	89	
Fundamentals of Computer Science	2.0	95	
Academic Year 2017-2018			
Courses (1st Term)	*Cr	*Sc	
Integrate Practice for Courses II	2.5	88	
English Level Test	1.0	P	
Logics (H)	3.0	92	
Operating System	5.0	84	
Numerical Analysis	3.0	78	
E-commerce System Structure	2.5	90	
Smartphone Software Development	2.0	92	
Theory of Computation	2.0	84	
Programming Principle	2.0	85	
Academic Year 2018-2019			
Courses (1st Term)	*Cr	*Sc	
Engineering Practice	3.0	95	
Literary & Art Aesthetics	1.5	84	
Practice Ability & Quality Development	4.0	A	
Overall GPA: 3.87/4.0 (87.73/100)			
Degree Granted:			



Three grade systems are used simultaneously in Zhejiang University, specifically as follows (*Cr=Credits; *Sc=Score):

1. The percentage system: Above 60 is passing, 100 is full mark;
2. Five degree grading: Excellent (A), Good (B), Fair (C), Passing (D), Failed (E);
3. Two degree grading: Passing (P), Failed (F);
4. Courses identified with "*" are transferred from partner universities.
5. Courses identified with "SA" are taken and calculated into GPA according to the highest score right corner as a line, they can be seen under the magnifying glass.

Associate Provost:

Registrar: Zhang Jifeng

Date Issued: 11/27/2018

The system of General Point Average(GPA)

The system of GPA used for academic transcript of Zhejiang University is established as follows:

1. The relation of score to grade point:

Percentage System	Score	100-86	85-83	82-80	79-77	76-74	73-71	70-68	67-65	64-62	61-60	<60
	Grade Point	4.0	3.9	3.6	3.3	3.0	2.7	2.4	2.1	1.8	1.5	0
Five Degree Grading	Score	Excellent (A)	Good (B)		Fair (C)			Passing (D)				Failed (F)
	Grade Point	4.0	3.5		2.5			1.5				0
Two Degree Grading	Score	Passing (P)										Failed (F)
	Grade Point	3.0										0

2. Formula:

$$\text{GPA} = \frac{\sum (\text{credits} * \text{grade point})}{\sum \text{credits}}$$

Undergraduate School
Zhejiang University





Chu Kochen Honors College, Zhejiang University, Hangzhou, Zhejiang, P.R. China

Tel: +86-571-88206047, +86-571-88981115

Fax: +86-571-88206993 Website <http://ckc.zju.edu.cn/>

Certificate of Chu Kochen Honors College Students

This is to certify that Mr./Miss Zixuan ZHU (Registration No. 3150105250, born in Jan, 1997, entered Arts Honors Class in Chu Kochen Honors College of Zhejiang University through rigorous screening in September, 2015. Her/His major is Computer Science.

Arts Honors Class is an Honors Program for the top 5% students at Zhejiang University. It emphasizes students' solid academic background, as well as a wide range of knowledge, creativity and ability to undertake research work independently.

Selection

In September 2015, 59 students were selected out of approximately 1500 freshmen majoring in humanities and social sciences of the whole university, based on their high school GPA, performance in screening tests and interviews.

Curriculum

A special curriculum is designed to help students build up a solid academic background. Students in Arts Honors Class will take mathematics, economics, law, literature, philosophy, history, etc. as their fundamental courses. The curriculum also emphasizes the learning of mathematics, physics, English and computer science. The mathematics textbooks they use are the same as those for students in Mathematics Department at the university. They are also encouraged to learn graduate courses in advance.

Faculty

Students in Arts Honors Class are instructed by distinguished professors in Zhejiang University, who are with rich teaching and research experiences and full of enthusiasm for this program.

Evaluation

A strict evaluation system with elimination policy is practiced. Only students who kept outstanding academic performance record and managed to complete the program in Arts Honors Class are awarded the certificate.

Research

From their junior year, students start doing research under the supervision of outstanding professors. Through rigorous training, they gain rich research experience.

Administration

Students in Chu Kochen Honors College are full time undergraduate students. Compared with other undergraduate students in Zhejiang University, they enjoy more privileges in curriculum and research.

Chu Kochen Honors College
Zhejiang University
27th/Nov/2018

(This certificate is invalid without the official seal of Chu Kochen Honors College.)

Zixuan ZHU

+86-181-4346-5372 | zixuanzhu0103@gmail.com

5 Yulan Rd, Yuhuatai Dist, Nanjing, Jiangsu, China 210000

EDUCATION

Zhejiang University (ZJU), Chu Kochen Honors College (CKC)	Hangzhou, Zhejiang, China
<i>Bachelor of Engineering in Computer Science with Minor in English</i>	Expected July 2019
<ul style="list-style-type: none">Overall GPA: 3.87/4Honors: National Scholarship, Merit Scholarship, ZJU Outstanding Student, CKC Outstanding Student	
GRE: Verbal 157, Quantitative 170, Analytical Writing 3.5	September 2018
TOEFL: Reading 25, Listening 29, Speaking 23, Writing 27, Total 104	October 2018

INTERNSHIP EXPERIENCE

Morgan Stanley	Shanghai, China
<i>Summer Tech Intern</i>	July – September 2018
<ul style="list-style-type: none">Independently developed a configurable automated deployment tool with post-deployment validation functionality on Axiom platformImproved software deployment accuracy from 85% to 100% and efficiency by 80%	

PROJECT EXPERIENCE

Course Project: Vocabulary Building Website	March – June 2018
<ul style="list-style-type: none">Developed a vocabulary-building web application followed the MVC pattern by using PHP, MySQL, Bootstrap, CSS, and CodeIgniterEmployed the Ebbinghaus Forgetting Curve theory to improve reviewing functionality	
ZJU Student Research Training Program	June 2017 – May 2018
<ul style="list-style-type: none">Built an Android academic translation app based on Google Cloud Translation APIApplied HMM (Hidden Markov Models) theories to build a Chinese word segmentation systemExtended the segmentation system to an Android dictionary app with example sentences	
Course Project: Musical Painting App with Social Features	September – December 2017
<ul style="list-style-type: none">As the leader of a team of three students, designed the architecture and conducted requirement analysis of an Android app with a painting canvas and social featuresImplemented a painting canvas with 10+ special rendering effects, the overall UI design and final module integration	
Major Recommendation System	August – October 2016
<ul style="list-style-type: none">Initiated collaboration with the Register's Office of CKC College and designed a major recommendation mobile web application to help students choose a college major based on their interests and talentsReceived 5,000+ hits (20+ per person in freshman class) within one week of release	

EXTRACURRICULAR ACTIVITIES

Secretary, Youth League Committee of CKC College	September 2015 – June 2016
Director of Internal Affairs, ZJU Formal Reception Team	September 2015 – Present
Member, Internet Association of ZJU	November 2017 – Present

PROGRAMMING LANGUAGES

Java, C/C++, Shell, MySQL, Python, PHP, HTML

朱梓媛, ZHU ZIXUAN

Welcome to NEEA TOEFL iBT® Online

Registration System

Log Out

NEEA ID: 6869408

ETS ID: 11816781

Account Balance: RMB¥0.00

Gender: Female

Date of Birth: Jan 3, 1997

PROFILE

View Profile

Update
Login
Password

FINANCE

Payments

Request a
Refund

TOEFL iBT® VALUE PACKAGE

Purchase
Value
Package

View Value
Package

TOEFL iBT® REGISTRATION

Search Seats

Register for
Test

View Orders

View Scores

Finished Test

Program

TOEFL iBT®

ETS Registration
Number

0000000034252558

Test Date

Sunday, October 28, 2018

Test Center

STN80041D Zhejiang Education Examination Authority(Wenhui Road Test Center)

Test Status

CHECKED IN

Score

Reading

Listening

Speaking

Writing

Total

25

29

23

27

104

View ETS Score Report

Score Review
Service

Apply for Score Review Service

Deadline: 2018-11-27

23:59:59

Score Recipients

View/Add

Valid for two years begin with the test day

Score Report
Mailing

Mailing Address

Address

浙江省杭州市西湖区浙江大学玉泉校区

Post Code

310058

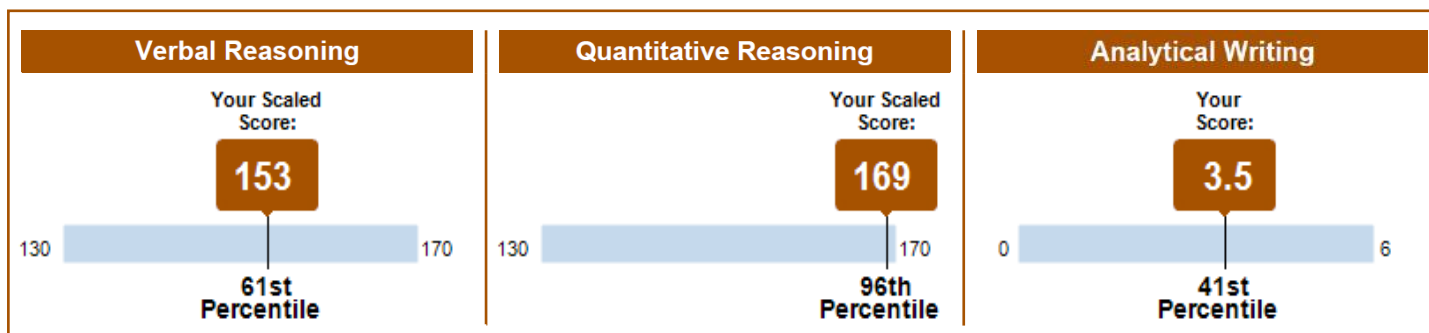
Mobile
Number

15305198628

ZIXUAN ZHU**Most Recent Test Date: May 13, 2018****Address:** Room 602, Building No.8, No.5 Yulan Road, Yuhuatai Dist, Nanjing, Jiangsu, 210000 China

Registration Number: 3150473

Print Date: November 2, 2018

Email: zixuanzhu0103@gmail.com**Phone:** 86-15305198628**Date of Birth:** January 3, 1997**Social Security Number (Last Four Digits):****Gender:** Female**Intended Graduate Major:** Computer Science (0402)**Your Scores for the General Test Taken on May 13, 2018****Your Test Score History****General Test Scores**

Test Date	Verbal Reasoning		Quantitative Reasoning		Analytical Writing	
	Scaled Score	Percentile	Scaled Score	Percentile	Score	Percentile
May 13, 2018	153	61	169	96	3.5	41
March 4, 2018	Not Available	---	Not Available	---	Not Available	---
September 23, 2017	157	76	170	96	3.5	41
July 10, 2015	153	61	168	94	3.0	17
May 10, 2015	152	56	170	96	2.5	7

• **Not Available** - Scores are currently not available. Please allow 10-15 days after a computer-delivered test or 5 weeks after a paper-delivered test for your scores to be reported.

Subject Test Scores

You do not have reportable test scores at this time.

Your Score Recipient(s)**Undergraduate Institution**

Report Date	Institution (Code)	Department (Code)	Test Title	Test Date
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ZIXUAN ZHU

Most Recent Test Date: May 13, 2018

Date of Birth: January 3, 1997

Registration Number: 3150473

Print Date: November 2, 2018

Designated Score Recipient(s)

Report Date	Score Recipient (Code)	Department (Code)	Test Title	Test Date
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About Your GRE® Score Report

Score Reporting Policies

With the *ScoreSelect*® option, you can decide which test scores to send to the institutions you designate. There are three options to choose from:

- Most Recent option – Send your scores from your most recent test administration
- All option – Send your scores from all administrations in the last five years
- Any option – Send your scores from one OR as many test administrations in the last five years (this option is not available on test day when you select up to four FREE score reports)

Scores for a test administration must be reported in their entirety. Institutions will receive score reports that show only the scores that you selected to send to them. There will be no special indication if you have taken additional GRE tests. See the *GRE® Information Bulletin* for details. The policies and procedures explained in the Bulletin for the current testing year supersede previous policies and procedures in previous bulletins.

Scores will be sent to designated score recipients approximately 10-15 days after a computer-delivered test and 5 weeks after a paper-delivered test. If your scores are not available for any reason, you will see "Not Available" in Your Test Score History.

GRE test scores are reportable according to the following policies:

- For tests taken prior to July 1, 2016, scores are reportable for five (5) years following the testing year in which you tested (July 1 – June 30). For example, scores for a test taken on May 15, 2015, are reportable through June 30, 2020. GRE scores earned prior to August 2011 are no longer reportable.
- For tests taken on or after July 1, 2016, scores are reportable for five (5) years following your test date. For example, scores for a test taken on July 3, 2016, are reportable through July 2, 2021.

Note: Score recipients will only receive scores from test administrations that you have selected to send to them.

Percentile Rank (% Below)

A percentile rank for a test score indicates the percentage of test takers who took that test and received a lower score. Regardless of when the reported scores were earned, the percentile ranks for General Test and Subject Test scores are based on the scores of all test takers who tested within the most recent three-year period.

Retaking a GRE Test

You can take the *GRE*® General Test *once every 21 days*, up to *five times* within any continuous rolling 12-month period (365 days). This applies even if you canceled your scores on a test taken previously. You can take the paper-delivered GRE General Test and *GRE*® Subject Tests as often as they are offered.

Note: This policy will be enforced even if a violation is not immediately identified (e.g., inconsistent registration information) and test scores have been reported. In such cases, the invalid scores will be canceled and score recipients will be notified of the cancellation. Test fees will be forfeited.

ZIXUAN ZHU**Most Recent Test Date: May 13, 2018****Date of Birth:** January 3, 1997

Registration Number: 3150473

Print Date: November 2, 2018

For More Information

For information about interpreting your scores, see *Interpreting Your GRE Scores* at www.ets.org/gre/understand.

For detailed information about your performance on the Verbal Reasoning and Quantitative Reasoning sections of the computer-delivered GRE General Test, access the free GRE Diagnostic Service from your ETS account. This service includes a description of the types of questions you answered right and wrong, the difficulty level of each question, and the time spent on each question. This service is available approximately 15 days after your test administration and for six months following your test administration.

If you have any questions concerning your score report, email GRE Services at gre-info@ets.org or call 1-609-771-7670 or 1-866-473-4373 (toll free for test takers in the U.S., U.S. Territories and Canada) between 8 a.m. and 7:45 p.m. (New York Time).

Recommendation Form

The Graduate School Northwestern University Evanston, IL 60208-1113

Applicant Name: **Zixuan Zhu**

Program: **Computer Science: MS**

Applicant Waived Rights*: **This applicant has waived the right to view their recommendation.**

Recommender Name: **Jeffrey Zhang**

Organization Name: **Morgan Stanley**

Title: **Manager**

E-mail Address: **jinming.zhang@morganstanley.com**

Telephone Number: **[+86] 150 0060 2894**

Relationship to Applicant: **internship supervisor.**

Certification (Date): **12-09-2018**

*"Public Law 93-380, Educational Amendments Act of 1974, grants students the right to have access to letters of recommendation in their placement files. By selecting the "Waive access" option you are waiving access to these letters."



Jeffrey Zhang
Manager
Corporate & Funding Technology Department
Morgan Stanley (Shanghai)
12F, Kerry Parkside
1155 Fang Dian Road, Pudong
Shanghai, 201204, PR China
(+86) 150 0060 2894
jinming.zhang@morganstanley.com

Recommendation Letter for Ms. Zixuan Zhu

Dear Admissions Committee,

As a manager at Corporate & Funding Technology Department, Morgan Stanley's Shanghai Office, where Ms. Zixuan Zhu was a summer tech intern during the past summer (2018), I am very glad to recommend her to your university to further her studies.

Morgan Stanley's Shanghai office is an important IT research and development sector of the company. The project Zixuan involved in was a very special project of our company. In order to finish the required task of developing an automatic software deployment tool, Zixuan needed to learn everything about a special data management software called Axiom, not just superficially, but also the whole architecture and source code behind it. However, Zixuan left me a very good impression from the beginning when she started the learning process. She could understand everything about it with minimal help. In the software development process, Mr. Zhu could get the most out of our official instruction documents and finish the work with very little help from others. Her job came out great, well above my expectation. The software deployment tool was put into use in our research and development team before her internship ended.

I would say, Ms. Zhu is one of the most capable interns I have seen in our department. I would surely offer her a full-time job in our department. I feel sorry to lose her. In the meantime, I am sure her diligence and intelligence will enable her to perform well in your university.

Your sincerely,
Jeffrey Zhang

Recommendation Form

The Graduate School Northwestern University Evanston, IL 60208-1113

Applicant Name: **Zixuan Zhu**

Program: **Computer Science: MS**

Applicant Waived Rights*: **This applicant has waived the right to view their recommendation.**

Recommender Name: **Wenzhong He**

Organization Name: **Zhejiang University**

Title: **Associate Professor**

E-mail Address: **donhwz@zju.edu.cn**

Telephone Number: **86-136 0580 3421**

Relationship to Applicant: **instructor/student**

Certification (Date): **12-08-2018**

*"Public Law 93-380, Educational Amendments Act of 1974, grants students the right to have access to letters of recommendation in their placement files. By selecting the "Waive access" option you are waiving access to these letters."



Zhejiang University
Hangzhou, China

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Hangzhou, Zhejiang, China
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To Whom It May Concern,

I'm writing to recommend without any reservation Miss Zixuan ZHU to your esteemed MS program in Computer Science.

I came to know Miss Zhu two years ago when she took one course I instructed. Later, she became a research assistant in my lab. We met regularly and frequently. Over the time, she was always passionate, positive, and very capable in the area of computer science and technology.

The course of *Modern Linguistics* is a very demanding selective course. A lot of students take this to challenge themselves, or to prepare for the research in the area of linguistic studies or natural language processing. Zixuan did it for both. A conscientious grader, I always push my students to challenge themselves. Zixuan always embraced these challenges with optimism and dedication. She enjoys learning and displays qualities for a true scholar. I fully expect her to do graduate level work and to effect change in whatever domain she pursues, because she naturally rises to the force of a discussion and is a passionate thinker.

At the end of this course, Zixuan came to me and expressed her interest in conducting research in this area. I then advised her to enroll in our university's student research training program, and started to supervise her on designing a translation app. Very motivated, sincere and talented, she did not need too much hand holding. She finished the development of the app within just a few months, and there's a bigger half of the time left for this funded program. So, she went way beyond my expectation and started to build a vocabulary using the translation data. By using some advanced word segmentation algorithms, she was able to put an academic dictionary online, which basically doubled the work we originally proposed. Moreover, the work was original and creative, and high-quality. I was very satisfied with her work and gave her the highest score I have ever given on a student research training program.

Apart from her impressive academic performance, she also impressed me with her personalities. She is friendly, helpful and cooperative, keeping good terms with teachers as well as fellow students. She has a clear map for her own future and has been working hard to her goal. She loves research and will be good at it. I hope you would give her favorable consideration in her admission. You would not be disappointed. If more information is needed, please feel free to contact me by phone (86-13605803421) or email (donhwz@zju.edu.cn).

Sincerely,
Wenzhong HE

Associate Professor of Linguistics and Translation Studies
Director of the Lab for Translation and Localization Technologies

A handwritten signature in black ink, which appears to read 'He Wenzhong' in English and '何文忠' in Chinese characters.