Qingxiao Xu

Email: 201911081146@mail.bnu.edu.cn Tel: 86-19310194573

EDUCATION

Beijing Normal University **Beijing, China**
Bachelor of Engineering in Computer Science and Technology Sep 2019 – Jun 2023

- Major GPA: 88.46/100; BNU Second Class Scholarship (University-level)
- **Relevant courses:** Data Structures, Algorithm Design and Analysis, Linear Algebra, Probability Theory, Principles of Computer Composition, Operating Systems, Principles of Compilation, Principles of Database Systems, Computer Networks, Computational Methods, Digital Logic, Calculus, Discrete Mathematics

PROFESSIONAL EXPERIENCE

Beijing Institute of Advanced Technology for Big Data **Beijing, China**
Intern, Big Data Intelligence Research Department Mar 2022 – Oct 2022

- Developed an agile organizational task allocation algorithm, learn and adapt model, based on reinforcement learning
- Designed a human body pose recognition system using OpenPose: integrated OpenPose for identifying key skeletal points, trained SVM models for classification tasks

iFLYTEK **Beijing, China**
Intern, Human-Machine Interaction Group, Core Development Platform Oct 2022 – Mar 2023

- Fine-tuned dialogue generation models for specific dialog errors, constructed historical error datasets, and performed error detection using BERT.
- Conducted model distillation, training a 3-layer student model using logits from a pretrained 12-layer teacher model.

Tsinghua University **Beijing, China**
Research Assistant, Center for Brain-Inspired Computing Research (CBICR) Mar 2023 – Jul 2023

- Implemented real-time robot localization and autonomous navigation system on the Unitree quadruped robot.
- Designed and implemented brain-inspired object detection with an event camera and automated grasping algorithms for robotic arms.

RESEARCH AND PROJECT EXPERIENCE

Deep learning-based cave-in geological hazard identification **Beijing, China**
Undergraduate Researcher, Directed by Prof. Xianchuan Yu at BNU Jan 2021 – Mar 2022

- Used multi-source data to extract the features of landslide hazard areas and to identify the unknown areas effectively
- Extracted feature, detected collapse hazard, established support vector domain for collapse hazard points
- Applied deep learning, twin network feature recognition in concrete practice

Smart Campus - Chinese History Digital Museum Project **Beijing, China**
Key modeling technician, Directed by Prof. Yungang Wei at BNU Aug 2021 – Mar 2022

- Took charge of 3D virtual scene design and construction; proposed many scene design ideas, and independently completed the design and modeling of Qin and Han islands scene; skillful adopted PS mapping and blender model
- Recovered 132 artifacts on the There platform, designed and built virtual scenes

A diversified family education service system for the needs of the times **Beijing, China**
National-level Student Innovation and Entrepreneurship Training Program Mar 2022 – Mar 2023

- Build a small web application using SQLAlchemy with Flask

COMPETITIONS AND AWARDS

Beijing University Student Mathematical Modeling and Computer Application Competition
First Prize at Beijing City level (top 10%) May 2022

- Built a logistic fitting model to describe the relation between total confirmed COVID-19 cases and time
- Used KNN algorithm to model major classes of viruses in the four kingdoms of England and their respective propagation dynamics

Mathematical Competition in Modeling
Honorable mention May 2023

- Established a directed weighted network, United Nations' 17 Sustainable Development Goals as nodes
- Utilized Granger causality and Pearson correlation coefficients to compute asymmetric correlation strengths
- Employed the PageRank ranking algorithm and dynamic evolution models to identify priority development goals

Large Model and Embodied AI Challenge
First Prize at National level Dec 2023

- Created a semantic map with object detection from DBSCAN algorithm
- Innovatively combined tree data structures with large language models, providing a stable way to enhance the behaviors of large models (*https://github.com/HPCL-EI/RoboWaiter)*

EXTRACURRICULAR ACTIVITIES

Teaching in Middle Schools in Fujian and Hunan Aug 2020, 2021

- As the Team Leader, Completed with A grade; awarded the university-level excellent practice team

BNU Creative DIY Craft Club Sep 2020 – Jun 2021

- As the club president, organized routine handicraft activities and host joint activities with various colleges

SKILLS

Computer: Proficiency in C, C++, Python, SQL, etc.; good at using blender and PS; good at using Microsoft PowerPoint and Excel, etc.

Language: TOEFL 111 **Interests:** calligraphy (Soft Pen National Grade 9)

证　明

徐晴霄，学号：201911081146，生于 2001 年 12 月 11 日，现为我校人工智能学院　计算机科学与技术专业本科生，学制四年，入学时间为 2019 年 9 月。截至 2022 年 3 月 20 日，平均绩点为 3.7/4.0。

备注：平均绩点等于绩点成绩与学分的乘积之和除以学分之和。百分制成绩转换为绩点的方式为：绩点成绩=4-3（100-X）^{2}/1600　（60≦X≦100），其中 X 为课程百分制分数，100 分绩点为 4，60 分绩点为 1，60 分以下绩点为 0。五级制成绩转换为绩点的方式为：优秀=4.0；良好=3.6；中等=2.8；及格=1.7；不及格=0。

北京师范大学教务部（研究生院）

CERTIFICATE

This is to certify that XUQINGXIAO (Student ID: 201911081146, Date of Birth: December 11, 2001), who was enrolled into a four-year bachelor degree program in September 2019, is an undergraduate student of Computer Science and Technology at School of Artificial Intelligence, Beijing Normal University. By the end of March 20, 2022, the student's GPA is 3.7 / 4.0.

NOTE: GPA $= \frac{\Sigma\,(Grade\ Points \times Credits)}{\Sigma Credits}$

The conversion between the one hundred mark system and the grade point is: Grade Points = 4-3 (100-X)^2/1600　(60 ≦ X ≦ 100), of which X is the Hundred Mark, and 100 corresponds to 4, 60 corresponds to 1, below 60 corresponds to 0.

The conversion between five-level mark system and the grade point is ： Excellent = 4.0; Good = 3.6; Satisfactory = 2.8; Pass = 1.7; Fail = 0.

Provost's Office and Academic Affairs (Graduate School)

北京师范大学 教务部（研究生院） 证明专用章 BEIJING NORMAL UNIVERSITY

备注：本证明自 2020 年 9 月 1 日开始使用，供本科生、研究生在校生使用。

Note：This certificate takes effect from Sept.1st, 2020 and is applicable for undergraduate students and graduate students.

Beijing Normal University

Academic Transcript of Undergraduate Student

Name: XUQINGXIAO **Student ID:** 201911081146
Major: Computer Sciemce and Technology **Length of Program:** 4 Years
Department: School of Artificial Intelligence

Semester	Course Title	Credits	Score
2019-2020 Fall	Compendium of Chinese Modern History	3.0	80.0
	Introduction to Interactive Python Programming	2.0	84.0
	Aerobic Gymnastics	1.0	81.0
	Basic Physics B I	4.0	87.0
	Situation and Policy I	0.5	82.0
	Calculus I	6.0	87.0
	Comprehensive English Reading	2.0	88.0
	An Introduction to Information Science	2.0	75.0
2019-2020 Spring	Military Theory	2.0	89.0
	Situation and Policy II	0.5	88.0
	Calculus II	6.0	95.0
	Moral Education and Introduction to Law	3.0	90.0
	Volleyball	1.0	77.0
	Foundations of Program Design	3.0	99.0
	Comprehensive English Listening and Speaking	2.0	93.0
	Introduction to Computer Science	3.0	63.0
	Introduction to Unconventional Petroleum Resources	1.0	86.0
	Educational Financial Basis	2.0	91.0
	Water Resources Information Technology	2.0	89.0
2020-2021 Fall	Programming in C++	2.0	95.0
	Experiments of Basic Physics B I-1	2.0	86.3
	Taijiquan	1.0	87.0
	College English for Practical Use	2.0	91.0
	Digital Logic	3.0	90.0
	Data Structure	3.0	94.0
	Discrete Mathematics I	3.0	91.0
	Linear Algebra	4.0	82.0
	Principles of Marxism	3.0	94.0
	3D Virtual World	2.0	87.0
	Professional Practice I	1.0	84.9
	Chemistry and Life	2.0	90.0
	Landscape Ecology and Urban Ecological Infrastructure Construction	2.0	86.0
	Programming Practice	1.0	77.0
2020-2021 Spring	Academic English Reading and Writing	2.0	90.0
	Probability theory and stochastic process	3.0	93.0

Notes:

1. This version of transcript enables since September 1st, 2017.
2. This university assesses student performance in a course based on a hundred-mark, five-level, or two-level system.
3. The hundred-mark system can be converted to the five-level system as follows: A(Excellent, 90-100), B(Good, 80-89), C(Satisfactory, 70-79), D(Qualified, 60-69), F(Fail, below 60). It can also be converted to the two-level system as follows: P(Pass, 60-100), F(Fail, below 60).

2022-03-20

Beijing Normal University

Academic Transcript of Undergraduate Student

Name: XUQINGXIAO **Student ID:** 201911081146
Major: Computer Sciemce and Technology **Length of Program:** 4 Years
Department: School of Artificial Intelligence

	Mao Zedong Thoughts and Theoretical System of Socialism with Chinese Characteristics	3.0	88.0
	Discrete Mathematics II	3.0	91.0
	Algorithm Design and Analysis	3.0	84.0
	Survey of the United Kingdom	2.0	90.0
	Principles of Computer Composition	3.0	88.0
	Programming in JAVA	2.0	87.0
	Professional Practice II	2.0	A
	Appreciation of ancient Chinese painting and calligraphy	3.0	81.0
	the prevention of legal risk for duty crime on case study	2.0	94.0
2021-2022 Fall	An Introduction to Modern Chinese Literature Famous Writers	2.0	87.0
	Introduction to Xi Jinping's Thought on Socialism with Chinese characteristics for a New Era	2.0	88.0
	Multimedia Technology	2.0	92.0
	Women's Physique	1.0	84.0
	Operating System	3.0	93.0
	Principles of DBMS	3.0	97.3
	Introduction to Pattern Recognition	2.0	96.0
	Mao Zedong Thoughts and Theoretical System of Socialism with Chinese Characteristics II	2.0	97.0
	Compiling Principles	3.0	87.0
	Virtual Reality	2.0	85.0
	Computer Vision	2.0	97.0
	CET-4: 641 CET-6: 622		
	Total Credits : 129		

----------End of Record----------

Notes:

1. This version of transcript enables since September 1st, 2017.
2. This university assesses student performance in a course based on a hundred-mark, five-level, or two-level system.
3. The hundred-mark system can be converted to the five-level system as follows: A(Excellent, 90-100), B(Good, 80-89), C(Satisfactory, 70-79), D(Qualified, 60-69), F(Fail, below 60). It can also be converted to the two-level system as follows: P(Pass, 60-100), F(Fail, below 60).

2022-03-20