**PEIYANG GUO 郭培扬**

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**Permanent Address Current Address**

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Champaign, IL 61820 Champaign, IL 61820

**EDUCATION**

**University of Illinois Urbana-Champaign** **Expected Graduation: May 2026**

*Liberal Arts & Science (Computer Science + Linguistics)* GPA: 4.00/4.00, LAS Deans List

MATH416 Abstract Linear Algebra (Honor Section) A+H (H means Honor)

ECE110 Introduction to Electronics A+

PHYS211 University Physics: Mechanics A+

LING100 Intro to Language Science A+

CS225 Data Structure AH

CS173 Discrete Mathematics AH

CS128 Introduction to Computer Science II AH (max is A)

CS233 Computer Architecture (MIPS, Verilog) A

MATH347 Fundamental Mathematics A

RHET105 Writing and Research A

**Shanghai World Foreign Language Academy** **Graduation: May 2022**

*International Baccalaureate Diploma Programme* GPA: 42/45

Math HL 7/7 and Rank 1st in School

Physics HL 7/7

Music SL 7/7 and Rank 1st in School

CS EE A

**LEADERSHIP AND INVOLVEMENT**

**UIUC GITHUBER Urbana-Champaign, ILLINOIS**

*Co-leader September 2022 – Present*

* Collaborate and co-lead the MechMania-28 Game AI 24h Hackathon for MM28 Competition, 2nd place

<https://github.com/UIUC-Githuber/MM28>

* Participate in HackIllinois hackathon event, developed an AI video converter that convert video style

<https://github.com/CharlieDreemur/AI-Video-Converter>

**CS128 Honors Project Urbana-Champaign, ILLINOIS**

*Co-leader December 2022*

* Collaborate in project RustKill, a local area network server for Werewolf Game, Focus in Backend

<https://github.com/ETwilight/Rust-project>

**LOCRL (Programming & Modding Society) CHINA**

*Founder, President December 2015 – Present*

* Powerband, Artificial Intelligence Music Generator [Still Working, Half Individual Project]
* WebIDE, Android Application for Web Developing

**Computerization Club Shanghai, CHINA**

*Leader, AI Department Chief July 2020 – July 2021*

* Leader, Enspire Website for School Student Managing, Expand the club members by 300%
* AI Department Founder + Chief, Prototype for Eldiutor, an elderly companion chatbot

**WMC Mathematics Club Shanghai, CHINA**

*Vice President July 2020 – July 2021*

* Mathematics Modelling Department in World Foreign Language Academy

**UNRESTRAINED CONCERT Shanghai, CHINA**

*Founder, Piano Player, Coordinator*  *June 2021 – Present*

* The First Formal Classical Concert Festival in WFLA, will be holding the third concert this August
* Played S. Prokofiev Piano Concerto No.2 and F. F. Chopin Piano Concerto No.1, Whole Movements
* Lead Activity, Pick Location, Negotiate Rental Price, Accompanying and Ensemble, Publishing Host

**RESEARCH**

* Self-Research about *Energy-Based Reinforcement Learning* *October 2020*

A Novel Method of Reinforcement Learning Exploration process to handle Sparse-reward Environments

<https://github.com/ETwilight/Research/blob/master/EBEX/Energy%20Based%20Exploration%20in%20Reinforcement%20Learning%20-%20Brian%20Guo.pdf>

* Research in SJTU lab: *A New Benchmark for 2D-3D Object Discovery from Videos November 2020*

**AWARDS & DISTINCTIONS**

* 2020 Yau-Science Award for Computer Science **National Second Prize** *October 2020*
* 2020 High School Mathematical Contest in Modelling (HIMCM) **Honorable Mention** *November 2020*
* The International Mathematical Modelling Challenge 2020 **Meritorious** *January 2020*

**SKILLS & LANGUAGES**

**Skills:** Machine Learning Developing (Proficient) | Software & Web Developing (Proficient)

**Programming Languages**: C++, Python (and PyTorch), Java, JS (Proficient), Rust (Intermediate)

**Interests**: Machine Learning (Interpretability, NLP, RL, etc.) | Game Developing | Compiler