

PEIYANG GUO 郭培扬 (Preferred: Brian)

hellobrian18@gmail.com / pg22@illinois.edu

+1 (217) 979-6236 / +86 173 0213 9569

GitHub: <https://github.com/ETwilight>

LinkedIn: <https://www.linkedin.com/in/peiyang-guo-8bb84a252>

EDUCATION

University of Illinois Urbana-Champaign (Sophomore)

Expected Graduation: May 2026

Major in Mathematics & Computer Science

GPA: 3.98/4.00, LAS Deans List, LAS James Scholar

Minor in Electrical & Computer Engineering

MATH	416H	Abstract Linear Algebra (Honor Section)	A+H	(H means Honor)
CS	374	Introduction to Algorithms & Models of Computation	A	
ECE	110	Introduction to Electronics	A+	
PHYS	211	University Physics: Mechanics	A+	
CS	225	Data Structure	AH	
CS	233	Computer Architecture (MIPS, Verilog)	A	

Shanghai World Foreign Language Academy

Graduation: May 2022

International Baccalaureate Diploma Programme

GPA: 42/45

Math	HL	7/7 and Rank 1 st in School
Music	SL	7/7 and Rank 1 st in School
CS	EE	A

RESEARCH EXPERIENCES

- Research in [SJTU \(Shanghai Jiaotong University\) Apex Lab](#) on Quadrupled Robotics

May 2023 – Present

Working with [Associate Prof. \(Tenured\) Weinan Zhang](#) & [Ph.D. Hang Lai](#), worked on distillation (boost) of iterations to allow step-by-step autonomous learning process of quadrupled robot motion on complex terrains, still working

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

May 2020 – October 2021

Instructed by [Associate Prof. \(Tenured\) Weinan Zhang](#), 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

Worked with [Prof. Cewu Lu](#) & [Tenure-Track Assistant Prof. Yonglu Li](#)

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

INTERNSHIP

- Software Engineer at Infotmic CO LTD (www.infotm.com) July 2023 - August 2023

Studying & working on Linux Kernel & Linux Driver Developing and MATLAB Computer-Vision Algorithms

SKILLS & PROGRAMMING LANGUAGES & RESEARCH/PERSONAL INTERESTS

- **Skills:** Machine Learning (Proficient), especially in (Deep) Reinforcement Learning & Exploration Software & Web Developing (Proficient), Android (Java, XML, C) & HTML5/CSS/JS/TS/Vue
- **Research Interests:** Machine Learning & Deep Learning in any field, especially in:
Theory-side (such as Interpretability, Trust-worthy Machine Learning),
(Multi-agent / Deep / Traditional) Reinforcement Learning / Robotics,
Natural Language Processing
(I have sufficient experience in PyTorch, NumPy, etc.)
- **Programming Languages:** C++, C, Python, Java, gnu-x86: (Proficient), Rust: (Intermediate)
- **Personal Interests:** System Programming | Pure Mathematics (Analysis, Probability Theory)

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, AI Music Generator [still working, I am the main contributor, Personal Interest]
- 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, have held the third concert this August
- Lead Activity, Pick Location, Negotiate Rental Price, Accompanying and Ensemble, Publishing Host

ELECTRIC LINK OF THE RESUME

- <https://github.com/ETwilight/RESUME/blob/main/Resume%20Peiyang%20Guo.pdf>
- Available for download for viewing all the hyperlinks