PEIYANG GUO 郭培扬

hellobrian18@gmail.com / pg22@illinois.edu
(217) 979-6236

Permanent Address
208 E White Street - 9
Champaign, IL 61820

Current Address
208 E White Street – 9
Champaign, IL 61820

EDUCATION

University of Illinois Urbana-Champaign **Expected Graduation: May 2026**
Liberal Arts & Science (CS + Ling) GPA: 4.00/4.00, LAS Deans List, LAS James Scholar
(Will transfer to CS + Maths after this semester)

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	
CS233	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 1st in School
Physics	HL	7/7
Music	SL	7/7 and Rank 1st in School
CS	EE	A

RESEARCH

- 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),
  (Multi-agent) Reinforcement Learning / Imitation Learning / Robotics,
  Natural Language Processing
  (I have sufficient experience in PyTorch, Numpy, etc.)
- **Programming Languages**: C++, Python (and PyTorch), Java, JS: (Proficient), Rust: (Intermediate)
- **Personal Interests**: Capture-The-Flag | System Programming | Pure Mathematics (Algebra & Analysis)

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