Bo Peng

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Education

Sep 2022 – Jun 2026 (est.)	◇ **Undergraduate, Computer Science, Peking University** Part of the Peking University Turing Program. GPA 3.86/4.0 (Rank 4/146).
Aug 2024 – Dec 2024	◇ **Exchange Student, Computer Science, Carnegie Mellon University** GPA 4.0/4.0.
Sep 2021 – Jun 2022	◇ **Early Admission, Computer Science, Peking University** Commenced undergraduate coursework one year prior to formal enrollment while in high school.

Selected Awards

2024	◇ **Top 40 in US**, 85th William Lowell Putnam Mathematical Competition. Solution to problem A3 featured in the *American Mathematical Monthly, Volume 132, Issue 8.*
	◇ **Second Place Worldwide**, 47th ICPC World Finals.
2023	◇ **China National Scholarship** (Top 0.2%).
2020	◇ **Fifth Place in China**, 37th National Olympiad in Informatics.

Publications

SNARKs from LWE via Non-black-box Reductions. *To appear in STOC 2026.*
Zhengzhong Jin*, Mingqi Lu*, **Bo Peng***. (Alphabetical Order)

Zelda: Efficient Multi-server Preprocessing PIR with Unconditional Security. *To appear in IEEE S&P 2026.*
Ashrujit Ghoshal*, Mingxun Zhou*, **Bo Peng***, Elaine Shi*. (Randomized Author Order)

Pseudorandom Functions with Weak Programming Privacy and Applications to Private Information Retrieval. *Eurocrypt 2025.*
Ashrujit Ghoshal*, Mingxun Zhou*, Elaine Shi*, **Bo Peng***. (Randomized Author Order)

Omni6DPose: A Benchmark and Model for Universal 6D Object Pose Estimation and Tracking. *ECCV 2024.*
Jiyao Zhang*, Weiyao Huang*, **Bo Peng***, Mingdong Wu, Fei Hu, Zijian Chen, Bo Zhao, Hao Dong.

Scalable Overspeed Item Detection in Streams. *IEEE ICDE 2024.*
Yuhan Wu, Hanbo Wu, Chengjun Jia, **Bo Peng**, Ziyun Zhang, Tong Yang, Peiqing Chen, Kaicheng Yang.

Manuscripts

HunyuanVideo 1.5 Technical Report. *arXiv preprint 2511.18870, 2025.*
Tencent Hunyuan Foundation Model Team

Garbled Lookup Tables from Homomorphic Secret Sharing. *Cryptology ePrint Archive, Paper 2025/254, 2025.*
Liqiang Liu*, Tianren Liu*, **Bo Peng***. (Alphabetical Order)

Research Experience

Sep 2025 – Current	◇ **Intern, Tencent Hunyuan "Qingyun" Program** AI - Post training text-to-video diffusion model using DPO and GRPO. Mainly focus on training stabilization guided by theoretical insights.

Research Experience (continued)

Jul 2025 – Oct 2025   ◇ **Research Assistant, Northeastern University**
Cryptography - Succinct non-interactive arguments (SNARG) under standard assumptions using non-black-box reductions. Advised by Zhengzhong Jin.

Aug 2024 – Dec 2024   ◇ **Research Assistant, Carnegie Mellon University**
Cryptography - Private information retrieval (PIR) in Information Theoretic setting and One-Way Function setting. Advised by Elaine Shi.

Feb 2024 – June 2024   ◇ **Research Assistant, Peking University**
Cryptography - Garbled circuits with large gates. Advised by Tianren Liu.

Jul 2023 – Mar 2024   ◇ **Research Assistant, Peking University**
AI - Produced a large-scale dataset for 6D Object Pose Estimation, along with a baseline method using diffusion. Advised by Hao Dong.

Teaching and Community Service

Mar 2022 – Current   ◇ **Founder, Public Judge**
Founded and managed an online platform providing free high-quality training contests for competitive programming students. Organized 37+ contests to date. Link: https://pjudge.ac/.

Oct 2025   ◇ **Reviewer, STOC 2026**

Sep 2025 – Jan 2026   ◇ **Teaching Assistant, Peking University**
Fundamentals of Cryptography (Fall 2025).