

# Tony Li

Stony Brook, NY | [haolili@cs.stonybrook.edu](mailto:haolili@cs.stonybrook.edu) | [lhl08.github.io](https://lhl08.github.io) | [Google Scholar](#) | U.S. Citizen

## EDUCATION

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- 08/2024–Present **Ph.D., Computer Science**  
Stony Brook University, Stony Brook, NY  
**Focus:** Human-AI Interaction, Generative AI, LLM Agents  
**Advisor:** Xiaojun Bi
- 08/2020–06/2024 **B.Eng., Computer Science and Technology**  
University of Science and Technology of China, Hefei, China  
**Advisor:** Xing-Dong Yang

## PUBLICATIONS

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- CHI'26 **LI, TONY, MA, Y., LI, Z., YU, C., RAMAKRISHNAN, I., AND BI, X.** Keysense: Llm-powered hands-down, ten-finger typing on commodity touchscreens. In *Proceedings of the 2026 CHI Conference on Human Factors in Computing Systems* (2026), pp. 1–24
- CHI'25 **XU, W., LI, TONY, WANG, Y., YANG, X.-D., AND WU, T.-Y.** Bit: Battery-free, ic-less and wireless smart textile interface and sensing system. In *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems* (2025), pp. 1–18
- VRW'25 **MA, Y., LI, TONY, LI, Z., AND BI, X.** Llm-powered text entry in virtual reality. In *2025 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (VRW)* (2025), IEEE, pp. 1628–1629
- CHI EA'25 **XU, W., LI, TONY, WANG, Y., YANG, X.-D., AND WU, T.-Y.** Demonstrating bit: Battery-free, ic-less and wireless smart textile interface and sensing system. In *Proceedings of the Extended Abstracts of the CHI Conference on Human Factors in Computing Systems* (2025), pp. 1–5

## EXPERIENCE

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- 06/2025–09/2025 Graduate Research Assistant, **Advisor:** Xiaojun Bi, Stony Brook University  
- Developed an LLM-powered decoding pipeline that enables hands-down ten-finger typing on commodity touchscreens without additional hardware.  
- Fine-tuned FLAN-T5 models on large-scale synthetic and real noisy-to-clean text pairs, achieving significant accuracy gains over Bayesian baselines.
- 12/2024–03/2025 Graduate Research Assistant, **Advisor:** Xiaojun Bi, Stony Brook University  
- Designed an LLM-powered text entry system for Virtual Reality, integrating tap typing and word-gesture typing with raycasting and joystick-based inputs.

- Built a Unity-based VR prototype on Meta Quest Pro, connecting to an LLM decoder deployed on cloud GPUs.
- 07/2023–04/2024 Research Intern, **Advisor:** Xing-Dong Yang, Simon Fraser University
  - Embedded all-textile haptics with SMA material for higher reading rate, parallel computing, and sensitive sensing in textile sensor systems.
  - Proposed and evaluated design tools for prototyping all-textile and environmentally friendly haptic systems.
  - Developed a textile sensing interface that eliminates ICs, wires and batteries, enabling wireless power transfer and data acquisition on multi-sensor textile circuits.
- 01/2024–03/2024 Research Intern, **Advisor:** Liang He, Purdue University
  - Designed tool guide for 3D printing driven tufting dolls with lattice and guiding marks generation algorithms.

## SKILLS

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Programming	C, C++, Python, Java, Verilog HDL, Assembly, SQL, Shell Script
Frameworks	PyTorch, TensorFlow, Android Studio, Django, Flask, Unity
Tools	MySQL, MongoDB, AR/VR Development Tools, 3D Printing, Matlab
Hardware	FPGA/Verilog, Near-field wireless power & data transfer
Fabrication	Circuit Soldering, Sewing Programming (e-textile fabrication), Textile Weaving
Languages	English, Mandarin

## SELECTED AWARDS

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- 2025 Travel Grant to IEEE VR 2025, Saint Malo, France
- 2024 USTC Outstanding Undergraduate Thesis Award
- 2022 USTC Silver Scholarship
- 2022 Second Prize, The China Mathematics Competitions
- 2021 Wang Xiaomo Talent Program Scholarship, USTC

## TEACHING

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- Spring 2025 Teaching Assistant, CSE 334: Introduction to Multimedia Systems, Stony Brook University, with Prof. Anthony Scarlatos
- Fall 2024 Teaching Assistant, CSE 333: User Interface Development, Stony Brook University, with Prof. Anthony Scarlatos