Selena Song

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Education

University of California, Santa Cruz 2026.09 – Present
PhD Student, **Advisor:** Yuyin Zhou Santa Cruz, CA, USA

University of California, San Diego 2025.06 – 2026.01
Visiting Graduate Student, **Advisor:** Biwei Huang San Diego, CA, USA

University of Tokyo 2023.10 – 2025.10
Master of Engineering, **Advisor:** Yutaka Matsuo Tokyo, Japan

Fudan University 2019.09 – 2023.06
Bachelor of Science in Physics, **Advisor:** Jiping Huang Shanghai, China

Professional Experience

Alibaba Tongyi Lab 2026.06 – 2026.09
Research Intern

Conducted research on long-horizon LLM agents for multimodal office tasks, focusing on agent harness design and multimodal task verifiers.

Contributed to the post-training of Qwen models by developing synthetic data and task environments for supervised fine-tuning and reinforcement learning, improving model performance in multimodal office workflows.

NVIDIA Research 2026.03 – 2026.06
Research Collaborator

Conducted research on auto research agents and harness design in the medical and healthcare domains. Developed AutoMedBench, a benchmark for evaluating autonomous agents across end-to-end medical research workflows.

Publications

** Denotes equal contribution.*

1. **Learning Plug-and-Play Memory for Guiding Video Diffusion Models**
   Selena Song*, Ziming Xu*, Zijun Zhang, Kun Zhou, Jiaxian Guo, Lianhui Qin, Biwei Huang
   Under Review, 2026

2. **MMA: Benchmarking Multi-Modal Large Language Model in Ambiguity Contexts**
   Selena Song*, Ru Wang*, Liang Ding, Mingming Gong, Yusuke Iwasawa, Yutaka Matsuo, Jiaxian Guo
   Accepted by the ICLR 2025 DATA-FM Workshop and CPAL 2026

3. **AutoMedBench: Towards Medical AutoResearch with Agentic AI Models**
   Junqi Liu, **Selena Song**, Yuhan Wang, Jiawei Mao, Hardy Chen, Xiaoke Huang, Tianhao Qi, Pengfei Guo, Yucheng Tang, Yufan He, Can Zhao, Andriy Myronenko, Dong Yang, Daguang Xu, Yuyin Zhou
   Under Review, 2026

4. **Video Models Can Reason with Verifiable Rewards**
   Tinghui Zhu, Sheng Zhang, James Y. Huang, **Selena Song**, Xiaofei Wen, Yuankai Li, Hoifung Poon, Muhao Chen
   Accepted by NeurIPS 2026

5. **Beyond In-Distribution Success: Scaling Curves of CoT Granularity for Language Model Generalization**
   Ru Wang*, Wei Huang*, **Selena Song**, Haoyu Zhang, Qian Niu, Yusuke Iwasawa, Yutaka Matsuo, Jiaxian Guo
   Accepted by CPAL 2026

Skills

Programming & ML:	Python, C/C++, SQL, PyTorch, NumPy, Pandas, Matplotlib, Jupyter Notebook
Tools & Platforms:	Linux, Git, Docker, COMSOL, OriginLab, HTML, LaTeX
Languages:	Mandarin, English, Japanese