Recruitment Statement

Radio Lab at Nanyang Technological University, Singapore

The Radio Lab at Nanyang Technological University, Singapore is welcoming self-motivated AI and LLM talents worldwide to work on building Responsible, Aligned, Deployable Intelligence for human gOod (Radio). Specifically, we are hiring PhD / master / undergraduate students, research assistants to join our lab (details below)! Additionally, we also welcome visiting PhD students that are either self-funded or funded by CSC, and PhD students that are supported by various scholarships. We will also host research interns (remote or onsite) starting from Summer 2025. Please send your CV, research statement and other related information to radiolab.ntu.recruiting@gmail.com, and check more information at https://d12306.github.io/recru.html.

Research Interest. My current research focus is to develop theory and algorithms for reliable machine learning, foundation model reliability, and related applications, specifically I work on:
− Out-of-distribution (OOD) research: designing adaptive and interpretable learning principles that help ML models detect and generalize on OOD samples, such as semantic/covariate shifts, adversarial and noisy samples.
− Reliability of foundation models: understanding the blindspots of LLMs and Multimodal LLMs through uncertainty estimation, such as model hallucination detection and mitigation.
− Security of foundation models: Exploring how foundation models can be strengthened against emerging threats, including prompt injection, jailbreak attacks, and distributional vulnerabilities.
− Other interested topics: LLM alignment, Agentic AI.
− Interdisciplinary research: Biometrics, AI-aided cryo-microscopy/protein structural analysis.

PhD students. (Starting from Spring 2026 and onwards)
− Requirements: Academic Integrity (non-negotiable!) with research motivation and curiosity; Academic background in computer science, AI, data science, statistics; Research background in AI, foundation models, ML theory, and ML safety (preferred); Familiar with mainstream deep learning frameworks such as PyTorch; Good English communication skills [TOEFL (above 100); IELTS (above 6.5)].
− Positions are fully funded. Currently, I have two 4-year scholarships available.

PhD students with scholarships. The Lab is happy to support PhD students with scholarships awarded, e.g., Nanyang President's Graduate Scholarship (NPGS), AISG PhD Fellowship (AISG), A*STAR Computing and Information Science (ACIS), and other possible resources, see https://www.ntu.edu.sg/graduate-college/admissions for details.

Master and undergraduates. I am happy to host NTU master and undergraduate students on their dissertation and final-year projects. A time commitment of at least one semester is required.

Research assistants, and interns. I am happy to host a few visiting students (onsite or remote), research assistants, and interns in my lab, starting from the summer of 2025. I will offer funding for these positions depending on the situation. A commitment of at least one semester is required.

About PI. Sean (Xuefeng) Du is an incoming assistant professor at College of Computing and Data Science (CCDS), NTU. Sean obtained his Ph.D. in Computer Sciences at UW-Madison advised by Prof. Sharon Li. His research interest is in reliable machine learning and the applications to foundation models and AI safety. His first-author papers have been recognized with multiple oral and spotlight presentations at NeurIPS and CVPR. He is a recipient of the Jane Street Graduate Research Fellowship, and Rising Stars in Data Science award. Please check the webpage https://d12306.github.io for details.