

EDUCATION	Texas A&M University Ph.D. in Statistics GPA: 4.00/4.00 Beijing Normal University B.S. in Statistics GPA: 3.87/4.00; Rank: 1/58	College Station, TX 2025–2030 (expected) Beijing, China 2021–2025
RESEARCH INTERESTS	World models and JEPA; visual representation learning for planning and control; visual and spatial reasoning. My research connects representation geometry and optimization to improve the efficiency of latent-space planning.	
PUBLICATIONS	Ziang Fu, Ning Ning. Control-Geometry Straightening for Sampling-Based Latent Planning . arXiv preprint arXiv:2609.35603, 2026.	
RESEARCH PROJECTS	Control-Geometry Straightening for Latent World Models 2026 <i>Texas A&M University; with Prof. Ning Ning</i> - Designed and implemented a JEPA training objective aligning action and latent-transition geometry for visual planning. - Derived linear-dynamics guarantees connecting representation geometry to sampling-based and gradient-based planning. - Ran control-task experiments, representation probes, and planner ablations using LeWM and DINO-WM architectures. Distributionally Robust Multi-Source Learning May 2024–Apr 2025 <i>Supervisor: Prof. Zijian Guo, Rutgers University</i> - Developed and implemented a mirror-prox algorithm for semi-supervised multi-source classification, optimizing predictive models against worst-case source weights through a distributionally robust min–max formulation. - Investigated non-Gaussian limiting distributions and estimator instability to understand failures of standard confidence intervals in robust multi-source learning. - Implemented a sampling-injected inference method to construct confidence intervals under these non-regular settings. Research Assistant in Biostatistics Sep 2023–Jun 2024 <i>Supervisor: Prof. Min Zhang, Tsinghua University</i> - Prepared undergraduate teaching materials on mathematical epidemic models, explaining modeling assumptions and mechanisms of COVID-19 dynamics, including SAPHIRE and MERMAID. - Reviewed pediatric liver allocation systems and synthesized challenges in waitlist mortality and transplant access; identified gaps in jointly accounting for allocation risk and post-transplant outcomes.	
INTERNSHIP	Institute of Urban Meteorology, CMA Jun–Sep 2024 <i>Beijing, China</i> Implemented XGBoost, CatBoost, LightGBM, linear regression, and ARIMA for wind-speed prediction; calibrated physics-based forecasts to reduce prediction errors.	
TECHNICAL SKILLS	Programming: Python, R; working knowledge of C++ and Rcpp. Machine learning: PyTorch; JEPA and latent world models; self-supervised representation learning; CEM, MPPI, and gradient-based planning. Optimization and statistics: Min–max optimization, mirror-prox methods, statistical inference; Python/R package development. Research tools: LaTeX, R Markdown.	
SELECTED HONORS	National Scholarship, Ministry of Education, China 2024 Finalist (top 1%), Interdisciplinary Contest in Modeling 2023	