

Moule Lin

Marie Skłodowska-Curie Fellow · Ph.D. Candidate, Trinity College Dublin
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Research Interests

Stochastic processes and probabilistic modelling for large language models · Bayesian deep learning and uncertainty estimation for LLMs · parameter-efficient fine-tuning · knowledge distillation for LLM reasoning and code

Education & Research Positions

Imperial College London <i>Visiting Researcher, Department of Computing · host: Dr. Yingzhen Li</i> – Research on stochastic processes for large language models	2026.10 – Present London, UK
Trinity College Dublin <i>Ph.D. Candidate in Computer Science, School of Computer Science and Statistics</i> – Marie Skłodowska-Curie Fellow (MSCA) — uncertainty estimation for large language models	2024.04 – 2027.06 Dublin, Ireland
Eötvös Loránd University <i>M.Sc. in Artificial Intelligence, Faculty of Informatics</i> – GPA 3.4/4 · Stipendium Hungaricum Scholarship (full scholarship) · Excellent Thesis · SH Network Mentor	2021.09 – 2023.06 Budapest, Hungary
Northeast Forestry University <i>M.Sc. in Computer Science, College of Computer and Control Engineering</i> – GPA 4.38/5 · National Graduate Scholarship (2022) · First Class Scholarship for Postgraduates (×3)	2020.09 – 2024.06 Harbin, China
Tianjin Agricultural University <i>B.Eng. in Software Engineering, School of Information and Computer Engineering</i> – GPA 3.36/4 · Blue Bridge Cup Algorithm Competition: National First Prize (ranked 27 / 51,282) · Tianjin First Prize – People's Government Scholarship (Tianjin) · First Class Academic Scholarship · Honorary Graduate	2015.09 – 2019.06 Tianjin, China

Publications

ICML 2026	Lin, M. , Guan, S., Patane, A., Gregg, D., & Botterweck, G. Bayesian-LoRA: Probabilistic Low-Rank Adaptation of Large Language Models.
AAAI 2026	Lin, M. , Patane, A., Jing, W., Guan, S., & Botterweck, G. Flow-Induced Diagonal Gaussian Processes.
AISTATS 2025	Lin, M. , Guan, S., Jing, W., Botterweck, G., & Patane, A. Stochastic Weight Sharing for Bayesian Neural Networks.
TGRS	Lin, M. , Jing, W., Zou, W., Qiu, Z., & Li, C. Gaussian-Based Swap Operator for Context-Aware Extraction of Building Boundary Vectors. <i>IEEE Transactions on Geoscience and Remote Sensing</i> .
NeurIPS 2026	Lan, Q., Fan, M., Zhang, H., Duan, J., Lin, M. , Chen, J., Geng, B., & Jiang, X. BrainTRACE: Tracing Longitudinal, Multimodal, and Volumetric Evidence in Brain MRI Clinical Reasoning.
ICLR 2026	Guan, S., Lin, M. , Xu, C., Zhao, J., & Greene, D. Teaching VLMs to Admit Uncertainty in OCR from Lossy Visual Inputs.
EMNLP 2025	Guan, S., Xu, C., Lin, M. , & Greene, D. Effective Synthetic Data and Test-Time Adaptation for OCR Correction. <i>Main</i> .
ACL 2025	Guan, S., Lin, M. , Xu, C., Liu, X., Zhao, J., Fan, J., Xu, Q., & Greene, D. PreP-OCR: A Complete Pipeline for Document Image Restoration and Enhanced OCR Accuracy. <i>Main</i> .

Industry & Research Experience

Ubotica Technologies — MSCA Secondment <i>Researcher</i>	Ireland
– Deploying uncertainty-aware models on satellites for reliable onboard prediction and decision-making, applying my Bayesian learning and uncertainty estimation research to Ubotica's models	
Geely Group — Zeekr <i>Researcher in Autonomous Driving</i>	2023.07 – 2023.11 Shanghai, China
– Researched SOTA BEV models for automatic parking with fisheye cameras and LiDAR; improved large-scale training efficiency by ~8% via prefetched data loading on 2M+ images/videos	
– Built a low-light and dirty-camera detection model from data collection to deployment (ONNX, TensorRT) on the Zeekr vehicle platform	
Ericsson <i>Researcher, Model Fusion</i>	2021.07 – 2021.10 Budapest, Hungary
– Implemented new algorithms in CUDA/C++ (e.g. a Shift operator to accelerate inference); adapted Transformers into Swin-style local-attention variants for multi-modal data	
– Analysed communication-network data to predict user behaviour and preferences, helping operators optimise services	
AI Lab, Eötvös Loránd University — Model Compression Project <i>Researcher</i>	2022.07 – 2022.10 Budapest, Hungary
– Researched pruning, distillation and sparse architectures; proposed a novel “Swap” structure with ~10% inference speed-up, co-authoring <i>Optimized Vectorizing of Building Structures with Swap</i>	