Albert No

PERSONAL INFORMATIONS
phone: +82-10-6280-3504
e-mail: albertno@yonsei.ac.kr
webpage: https://ai-isl.yonsei.ac.kr

CURRENT

Yonsei University, Seoul, Korea
Associate Professor **03/2024 -**

EDUCATION

Stanford University, Stanford, CA, USA
PhD in Electrical Engineering **01/2010 - 09/2015**
(Advisor: Prof. Tsachy Weissman)

Stanford University, Stanford, CA, USA
MS in Electrical Engineering **09/2009 - 1/2012**
(Advisor: Prof. Tsachy Weissman)

Seoul National University, Seoul, Korea
BS in Electrical Engineering and Mathematics (Double Major) **03/2005 - 08/2009**

PREPRINT

(P1) Sangyeon Yoon*, Wooseok Seo*, Hamish Ivison, Hyesoo Hong, Donghoon Kim, Wonjun Kang, **Albert No**†, and Jaehyung Kim†, "Diagnosing and Correcting Reward Hacking in Verifiable Instruction Following," *submitted*

(P2) Moongyu Jeon*, Dongjae Jeon*, Bumjun Kim, Mingyu Kim†, and **Albert No**†, "Low-Confidence Remasking Traps Flexibility: Realizing Arbitrary-Order Potential for Diverse Rollouts in Diffusion LLMs," *submitted*

(P3) Yeachan Jun and **Albert No**, "JUMP: Single-Pass Membership Inference on Fine-Tuned Diffusion Language Models," *submitted*

(P4) Dueun Kim and **Albert No**, "The Confidence Shortcut: A Reasoning Failure Mode of Masked Diffusion Models," *submitted*

(P5) Soeun Kim and **Albert No**, "Where Rollouts Begin: Low-Load, High-Leverage First-Token Diversification for RLVR," *submitted*

CONFERENCE PUBLICATIONS

(C1) Hyesoo Hong, Minsoo Kim, Wonje Jeung, Sangyeon Yoon, Dongjae Jeon, and **Albert No**, "VLMs Trace Without Tracking: Diagnosing Failures in Visual Path Following," *Neural Information Processing Systems (NeurIPS)*, 2026

(C2) Shin So, Kyelim Lee, and **Albert No**, "Slower Generalization, Faster Memorization: A Sweet Spot in Algorithmic Learning," *Neural Information Processing Systems (NeurIPS)*, 2026

(C3) Sangyeon Yoon*, Wonje Jeung*, Yoonjun Cho, Dongjae Jeon, and **Albert No**, "Few-Shot Truly Benign DPO Attack for Jailbreaking LLMs," *Neural Information Processing Systems (NeurIPS)*, 2026

(C4) Moongyu Jeon*, Sangwoo Shin*, Bumjun Kim, Kyelim Lee, and **Albert No**, "A Theoretical Analysis of Why Masked Diffusion Models Mitigate the Reversal Curse," *Neural Information Processing Systems (NeurIPS)*, 2026

(C5) Wonje Jeung, Sangyeon Yoon, Hyesoo Hong, Yoonjun Cho, Dongjae Jeon, Bumjun Kim, Jean Oh†, Youngjae Yu†, and **Albert No**†, "Same Trajectory, Contradictory Rewards (RoboRMBench): Paraphrase Fragility in Vision Language Reward Models," *Conference on Empirical Methods in Natural Language Processing (EMNLP Oral, top 2.9%)*, 2026

(C6) Sangyeon Yoon, Hyesoo Hong, Wonje Jeung, Yongil Kim, Wooseok Seo, Heuiyeen Yeen, **Albert No**, and Sunkyoung Kim, "BenchPreS: A Benchmark for Context-Aware Personalized Preference Selectivity of Persistent-Memory LLMs," *Conference on Empirical Methods in Natural Language Processing (EMNLP Oral, top 2.9%)*, 2026

(C7) Sangyeon Yoon*, Yeachan Jun*, and **Albert No**, "Position: The Term 'Machine Unlearning' Is Overused in LLMs," *International Conference on Machine Learning (ICML Position)*, 2026

(C8) Pyo Min Hong and **Albert No**, "dgMARK: Decoding-Guided Watermarking for Diffusion Language Models," *International Conference on Machine Learning (ICML)*, 2026

(C9) Yoonjun Cho*, Dongjae Jeon*, Soeun Kim, Moongyu Jeon, and **Albert No**, "Preserve-Then-Quantize: Balancing Rank Budgets for Quantization Error Reconstruction in LLMs," *International Conference on Machine Learning (ICML)*, 2026

(C10) Bumjun Kim*, Dongjae Jeon*, Moongyu Jeon*, and **Albert No**, "Dependency-Aware Parallel Decoding via Attention for Diffusion LLMs," *International Conference on Machine Learning (ICML)*, 2026

(C11) Wonje Jeung*, Sangyeon Yoon*, Hyesoo Hong*, Soeun Kim, Seungju Han, Youngjae Yu, and **Albert No**, "DUSK: Do Not Unlearn Shared Knowledge," *Annual Meeting of the Association for Computational Linguistics (ACL Findings)*, 2026

(C12) Bumjun Kim and **Albert No**, "Memorization In Stable Diffusion Is Unexpectedly Driven by CLIP Embeddings," *The IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR Findings)*, 2026

(C13) Sangyeon Yoon, Hyesoo Hong, Wonje Jeung, and **Albert No**, "Rethinking Benign Relearning: Syntax as the Hidden Driver of Unlearning Failures," *International Conference on Learning Representations (ICLR)*, 2026

(C14) Wonje Jeung*, Sangyeon Yoon*, Yoonjun Cho, Dongjae Jeon, Sangwoo Shin, Hyesoo Hong, and **Albert No**, "A2D: Any-Order, Any-Step Safety Alignment for Diffusion Language Models," *International Conference on Learning Representations (ICLR)*, 2026

(C15) Bumjun Kim*, Dongjae Jeon*, Dueun Kim*, Wonje Jeung, and **Albert No**, "Rainbow Padding: Mitigating Early Termination in Instruction-Tuned Diffusion LLMs," *International Conference on Learning Representations (ICLR)*, 2026

(C16) Pura Peetathawatchai, Wei-Ning Chen, Berivan Isik, Sanmi Koyejo, and **Albert No**, "Differentially Private Adaptation of Diffusion Models via Noisy Aggregated Embeddings," *IEEE Secure and Trustworthy Machine Learning Conference (SaTML)*, 2026

(C17) Dongjae Jeon*, Wonje Jeung*, Taeheon Kim, **Albert No**†, and Jonghyun Choi†, "An Information Theoretic Evaluation Metric For Strong Unlearning," *Association for the Advancement of Artificial Intelligence (AAAI)*, 2026

(C18) Moongyu Jeon, Sangwoo Shin, Dongjae Jeon, and **Albert No**, "Information-Theoretic Discrete Diffusion," *Neural Information Processing Systems (NeurIPS)*, 2025

(C19) Wonje Jeung, Sangyeon Yoon, Minsuk Kahng†, and **Albert No**†, "SAFEPATH: Preventing Harmful Reasoning in Chain-of-Thought via Early Alignment," *Neural Information Processing Systems (NeurIPS)*, 2025

(C20) Wonje Jeung*, Sangyeon Yoon*, and **Albert No**, "SEPS: A Separability Measure for Robust Unlearning in LLMs," *Conference on Empirical Methods in Natural Language Processing (EMNLP Main)*, 2025

(C21) Sangyeon Yoon, Wonje Jeung, and **Albert No**, "R-TOFU: Unlearning in Large Reasoning Models," *Conference on Empirical Methods in Natural Language Processing (EMNLP Main)*, 2025

(C22) Yoonjun Cho, Soeun Kim, Dongjae Jeon, Kyelim Lee, Beomsoo Lee, and **Albert No**, "Assigning Distinct Roles to Quantized and Low-Rank Matrices Toward Optimal Weight Decomposition," *Annual Meeting of the Association for Computational Linguistics (ACL Findings)*, 2025

(C23) Dongjae Jeon*, Dueun Kim*, and **Albert No**, "Understanding and Mitigating Memorization in Generative Models via Sharpness of Probability Landscapes," *International Conference on Machine Learning (ICML Spotlight, top 2.6%)*, 2025

(C24) Wei-Ning Chen, Berivan Isik, Peter Kairouz, **Albert No**, Sewoong Oh, and Zheng Xu, "Improved Communication-Privacy Trade-offs in L2 Mean Estimation under Streaming Differential Privacy," *International Conference on Machine Learning (ICML)*, 2024

(C25) TaeHo Yoon, Kibeom Myoung, Keon Lee, Jaewoong Cho, **Albert No**, and Ernest K. Ryu, "Censored Sampling of Diffusion Models Using 3 Minutes of Human Feedback," *Neural Information Processing Systems (NeurIPS)*, 2023

(C26) Berivan Isik, Wei-Ning Chen, Ayfer Ozgur, Tsachy Weissman, and **Albert No**, "Exact Optimality of Communication-Privacy-Utility Tradeoffs in Distributed Mean Estimation," *Neural Information Processing Systems (NeurIPS)*, 2023

(C27) Jinhyuk Park and **Albert No**, "Prune Your Model Before Distill It," *European Conference on Computer Vision (ECCV)*, 2022

(C28) Jongmin Lee, Joo Young Choi, Ernest K. Ryu†, and **Albert No**†, "Neural Tangent Kernel Analysis of Deep Narrow Neural Networks," *International Conference on Machine Learning (ICML)*, 2022

(C29) Berivan Isik, Tsachy Weissman, and **Albert No**, "An Information-Theoretic Justification for Model Pruning," *International Conference on Artificial Intelligence and Statistics (AISTATS)*, 2022

(C30) **Albert No**, Taeho Yoon, Se-Hyeon Kwon, and Ernest K. Ryu, "WGAN with an Infinitely Wide Generator Has No Spurious Stationary Points," *International Conference on Machine Learning (ICML)*, 2021

(C31) Idoia Ochoa, **Albert No**, Mikel Hernaez, and Tsachy Weissman, "CROMqs: Rateless Lossy Compression of Quality Scores," *Information Theory Workshop (ITW)*, 2016

(C32) **Albert No** and Tsachy Weissman, "Universality of Logarithmic Loss in Lossy Compression," *International Symposium on Information Theory (ISIT)*, 2015

(C33) **Albert No** and Tsachy Weissman, "Rateless Lossy Compression via the Extremes," *Annual Allerton Conference on Communication, Control, and Computing*, 2014

(C34) Jiantao Jiao, Thomas Courtade, **Albert No**, Kartik Venkat, and Tsachy Weissman, "Information Divergences and the Curious Case of the Binary Alphabet," *International Symposium on Information Theory (ISIT)*, 2014

(C35) **Albert No**, Amir Ingber, and Tsachy Weissman, "Strong Successive Refinability: Sufficient Conditions," *International Symposium on Information Theory (ISIT)*, 2014

(C36) **Albert No**, Amir Ingber, and Tsachy Weissman, "Complexity and Rate-Distortion Tradeoff via Successive Refinement," *Annual Allerton Conference on Communication, Control, and Computing*, 2013

(C37) **Albert No** and Tsachy Weissman, "Minimax Filtering via Relations between Information and Estimation," *International Symposium on Information Theory (ISIT)*, 2013

(C38) Bobbie G. Chern, Idoia Ochoa, Alexandros Manolakos, **Albert No**, Kartik Venkat, and Tsachy Weissman, "Reference Based Genome Compression," *Information Theory Workshop (ITW)*, 2012

(C39) **Albert No**, Kartik Venkat, and Tsachy Weissman, "Joint Source-Channel Coding of one Random Variable over the Poisson Channel," *International Symposium on Information Theory (ISIT)*, 2012

PEER-REVIEWED WORKSHOP

(W1) Sangyeon Yoon*, Wonje Jeung*, and **Albert No**, "Adversarial Sample-Based Approach for Tighter Privacy Auditing in Final Model-Only Scenarios," *Neural Information Processing Systems Workshop (Statistical Frontiers in LLMs and Foundation Models @ NeurIPS)*, 2024

(W2) Haechang Lee, Wongi Jeong, Dongil Ryu, Hyunwoo Je, **Albert No**, Kijeong Kim, and Se Young Chun, "Fully Quantized Always-on Face Detector Considering Mobile Image Sensors," *International Conference on Computer Vision Workshop (LBQNN @ ICCV, Oral)*, 2023

(W3) Andrey Ignatov, Radu Timofte, Shuai Liu, Chaoyu Feng, Furui Bai, Xiaotao Wang, Lei Lei, Ziyao Yi, Yan Xiang, Zibin Liu, Shaoqing Li, Keming Shi, Dehui Kong, Ke Xu, Minsu Kwon, Yaqi Wu, Jiesi Zheng, Zhihao Fan, Xun Wu, Feng Zhang, **Albert No**, Minhyeok Cho, Zewen Chen, Xiaze Zhang, Ran Li, Juan Wang, Zhiming Wang, Marcos V. Conde, Ui-Jin Choi, Georgy Perevozchikov, Egor Ershov, Zheng Hui, Mengchuan Dong, Xin Lou, Wei Zhou, Cong Pang, Haina Qin, and Mingxuan Cai, "Learned Smartphone ISP on Mobile GPUs with Deep Learning, Mobile AI & AIM 2022 Challenge: Report," *European Conference on Computer Vision Workshop (AIM @ ECCV)*, 2022

JOURNAL PUBLICATIONS

(J1) Ki-Wook Hong*, Minhyeok Jo*, Haechang Lee*, Se Young Chun, and **Albert No**, "A Simple Extension of Bayer Demosaicing For Lightweight Non-Bayer Demosaicing," *IEEE Access*, July 2025.

(J2) Yunfei Gao and **Albert No**, "Efficient and Low-Complexity Variable-to-VariableLength Coding for DNA Storage," *BMC Bioinformatics*, October 2024.

(J3) Joo Young Choi, Jaesung R. Park, Inkyu Park, Jaewoong Cho, **Albert No**, and Ernest K. Ryu, "Simple Drop-in LoRA Conditioning on Attention Layers Will Improve Your Diffusion Model," *Transactions on Machine Learning Research (TMLR)*, October 2024.

(J4) Kyelim Lee and **Albert No**, "Needleman-Wunsch Attention: A Framework for Enhancing DNA Sequence Embedding," *IEEE Access*, May 2024.

(J5) Yunfei Gao and **Albert No**, "Adaptable DNA Storage Coding: An Efficient Framework for Homopolymer Constraint Transitions," *IEEE Access*, January 2024.

(J6) Beomseok Seo and **Albert No**, "How Does a Transformer Learn Compression? An Attention Study on Huffman and LZ4," *IEEE Access*, December 2023.

(J7) Seong-Joon Park, Sunghwan Kim, Jaeho Jeong, **Albert No**, Jong-Seon No, and Hosung Park, "Reducing cost in DNA-based data storage by sequence analysis-aided soft information decoding of variable-length reads," *Bioinformatics*, September 2023.

(J8) Minhyeok Cho, Haechang Lee, Hyunwoo Je, Kijeong Kim, Dongil Ryu, and **Albert No**, "PyNET-QxQ: An Efficient PyNET Variant for QxQ Bayer Pattern Demosaicing in CMOS Image Sensors," *IEEE Access*, May 2023.

(J9) Sanghoon Kang*, Yunfei Gao*, Jaeho Jeong, Seong-Joon Park, Jae-Won Kim, Jong-Seon No, Ha Hyeon Jeon, Jeong Wook Lee, Sunghwan Kim, Hosung Park, and **Albert No**, "Generative Adversarial Networks for DNA Storage Channel Simulator," *IEEE Access*, January 2023.

(J10) Yunfei Gao and **Albert No**, "Age Estimation from fMRI Data Using Recurrent Neural Network," *Applied Science*, January 2022.

(J11) Minhyeok Cho and **Albert No**, "FCLQC: Fast and Concurrent Lossless Quality Scores Compressor," *BMC Bioinformatics*, December 2021.

(J12) Jaeho Jeong, Seong-Joon Park, Jae-Won Kim, Jong-Seon No, Ha Hyeon Jeon, Jeong Wook Lee, **Albert No**, Sunghwan Kim, and Hosung Park, "Cooperative Sequence Clustering and Decoding for DNA Storage System with Fountain Codes," *Bioinformatics*, April 2021.

(J13) Xiaozhou Lu, Jaeho Jeong, Jae-Won Kim, Jong-Seon No, Hosung Park, **Albert No**, and Sunghwan Kim, "Error Rate-Based Log-Likelihood Ratio Processing for Low-Density Parity-Check Codes in DNA Storage," *IEEE Access*, September 2020.

(J14) **Albert No**, Mikel Hernaez, and Idoia Ochoa, "CROMqs: Rateless Lossy Compression of Quality Scores," *Journal of Bioinformatics and Computational Biology*, September 2020.

(J15) **Albert No**, "Nonasymptotic Upper Bounds on Binary Single Deletion Codes via Mixed Integer Linear Programming," *Entropy*, December 2019.

(J16) Minseok Choi, **Albert No**†, Mingyue Ji, and Joongheon Kim†, "Markov Decision Policies for Dynamic Video Delivery in Wireless Caching Networks," *IEEE Transactions on Wireless Communications*, December 2019.

(J17) **Albert No**, "Universality of Logarithmic Loss in Fixed-Length Lossy Compression," *Entropy*, June 2019.

(J18) **Albert No**, "Universality of Logarithmic Loss in Successive Refinement," *Entropy*, February 2019.

(J19) Hyun Kim, **Albert No**, and Hyuk-jae Lee, "SPIHT Algorithm with Adaptive Selection of Compression Ratio Depending on DWT Coefficients," *IEEE Transactions on Multimedia*, December 2018.

(J20) **Albert No**, "Information Geometric Approach on Most Informative Boolean Function Conjecture," *Entropy*, September 2018.

(J21) **Albert No** and Tsachy Weissman, "Rateless Lossy Compression via the Extremes," *IEEE Transactions on Information Theory*, October 2016.

(J22) **Albert No**, Amir Ingber, and Tsachy Weissman, "Strong Successive Refinability and Rate-Distortion-Complexity Tradeoff," *IEEE Transactions on Information Theory*, June 2016.

(J23) Jiantao Jiao, Thomas A. Courtade, **Albert No**, Katik Venkat, and Tsachy Weissman, "Information Measures: The Curious Case of the Binary Alphabet," *IEEE Transactions on Information Theory*, December 2014.

(J24) **Albert No** and Tsachy Weissman, "Minimax Filtering via Relations between Information and Estimation," *IEEE Transactions on Information Theory*, August 2014.

DISSERTATION

Rateless Lossy Compression via the Extremes
Advisor: prof. Tsachy Weissman
The aim of my thesis research is to understand successive refinement more thoroughly so that we can use its ideas to construct a practical lossy compressor with theoretically attractive properties. I proposed an iterative lossy compressor achieving the information theoretic optimum distortion-rate bound with low computational complexity, low storage requirements, and additional properties of both theoretical and practical merit.

PROFESSIONAL EXPERIENCE

Hongik University, Seoul, Korea
Associate Professor **03/2023 - 02/2024**

Hongik University, Seoul, Korea
Assistant Professor **03/2017 - 02/2023**

Roche Sequencing Solutions, Santa Clara, CA, USA
Principal Scientist I **11/2015 - 02/2017**
- Implemented signal processing pipeline for Next Generating Sequencing (NGS).
- Designed simulators for Next Generation Sequencing.

Ericsson, CA, USA
Summer Internship **06/2013 - 09/2013**
- Designed algorithms for virtual load balancing for routers.
- Implemented RFC 6330 using C programming.

PATENT

DNA Sequence Embedding Device and Method Based on Attention Mechanism
Albert No and Kyelim Lee
US Patent Application (US 2026/0120806 A1), filed 2024

Method, Program, and Apparatus of Decoding Based on Soft Information of a DNA Storage Device
Sunghwan Kim, Hosung Park, **Albert No**, Jae Won Kim, Jaeho Jeong, and Jong Seon No

PCT Patent Application (PCT/KR2020/010571, WO 2021/033981 A1), filed 2020

Data Compression and Decompression
Albert No
Korean Patent (KR 10-2016125 B1), granted 2019