

Daiki Shiono

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Education

Tohoku University Apr 2024 – Mar 2027 (**expected**)
Ph.D. Program, Graduate School of Information Sciences
System Information Sciences; Suzuki Laboratory (TohokuNLP Group; Advisor: Prof. Jun Suzuki)

Tohoku University Apr 2022 – Mar 2024
M.S. in Information Science, Graduate School of Information Sciences
System Information Sciences; Suzuki Laboratory (TohokuNLP Group; Advisor: Prof. Jun Suzuki)

Tohoku University Apr 2018 – Mar 2022
B.E. in Engineering, School of Engineering
Department of Electrical, Information and Physics Engineering

Research and Industry Experience

Departmental Visiting Student Sep 2026 – Present
[University of Cambridge](#) | Department of Computer Science and Technology
Conducting research in Vision & Language and NLP, hosted by Prof. Andreas Vlachos and collaborating closely with Diana Galván Sosa.

Machine Learning R&D Engineer (Intern / Contractor) Apr 2024 – Oct 2026
[Turing Inc.](#) | Fundamental AI Group
Contributed to [training large-scale vision-language models \(LVLMs\)](#), [building a large-scale Japanese vision-language pretraining dataset](#), and [constructing a Japanese visual instruction-tuning dataset](#).

Research Assistant Apr 2023 – Mar 2027 (expected)
Center for Data-driven Science and Artificial Intelligence, Tohoku University
Supported research activities through experimental setup, documentation, data maintenance, and related project operations.

Part-time Machine Learning Engineer Mar 2023 – Dec 2023
[Future Inc.](#) | Strategic AI Group
Improved OCR models and developed a model for converting foreign personal names into Japanese readings.

Research Support Programs and Scholarships

Research Fellowship Sep 2024 – Mar 2027 (expected)
BOOST Program (Next-Generation AI Talent Development)
Received a research stipend and research funding through the Japan Science and Technology Agency (JST) BOOST initiative.

Research Fellowship Apr 2020 – Mar 2025
WISE Program for AI Electronics (AIE), Tohoku University
Participated in this MEXT-supported graduate education program and received educational and research support funding.

Scholarship Apr 2022 – Mar 2024
Japan Student Services Organization (JASSO) Scholarship
Granted a 50% repayment exemption in recognition of outstanding academic achievements.

Teaching Experience

Teaching Assistant

Oct 2023 – Feb 2024

Natural Language Processing

Graduate-level course, Graduate School of Information Sciences, Tohoku University

Teaching Assistant

Oct 2022 – Dec 2023

Introduction to Programming for Artificial Intelligence Technology

General education course, Tohoku University

Projects

Building a Large-Scale Collection of SFT Datasets Translated into Japanese

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Independent project

Ongoing

Large-Scale Fine-Tuning of a Japanese LLM for Mathematical Reasoning

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Collaborated on the large-scale fine-tuning of a Japanese LLM specialized for mathematical reasoning tasks, using NeMo on the ABCI 3.0 supercomputer.

Achieved **1st place** in the open division and **2nd place** overall in the [FT-LLM2026 Math Task](#).

March 2026

Sharing Slides Summarizing Insights on LVLMs as of 2024

[Link to Slide](#)

Independent project

November 2024

Building a Japanese BERT Model for Long-Sequence Processing

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Collaborated on the development and distributed pretraining of a Japanese BERT model supporting long-sequence inputs, using Megatron-LM on the TSUBAME4.0 supercomputer.

June 2024

Building SFT Datasets for Japanese LVLMs

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Outcome from my internship at [Turing Inc.](#)

September 2024

Journal Publications

Daiki Shiono, Shingo Yokoi, Shintaro Inuzuka, Tsubasa Takahashi, Jun Suzuki, Yu Yamaguchi. “MOMIJI: 日本語大規模インターリーブ視覚言語データセット.” *Journal of Natural Language Processing*, Volume 33, Issue 4 (General Paper; scheduled for publication December 15, 2026). **Accepted September 18, 2026.**

[Acceptance Listing](#) [Dataset](#) [Code](#)

Daiki Shiono, Shumpei Miyawaki, Ryota Tanaka, Jun Suzuki. “Instruction-Following Evaluation of Large Vision-Language Models.” *New Generation Computing*, Volume 44, Article 7, January 2026.

[Link to Paper](#) [Training Data](#)

Shoji Moriya*, **Daiki Shiono***, Riki Fujihara, Yosuke Kishinami, Subaru Kimura, Shusaku Sone, Reina Akama, Yuta Matsumoto, Jun Suzuki, Kentaro Inui (*equal contributions). “Aoba_v3 bot: a multimodal chatbot system combining rules and various response generation models.” *Advanced Robotics*, Volume 37, Issue 21, pp.1392–1405, August 2023.

[Link to Paper](#)

International Conference Publications

Raito Kiya, Satoki Ohashi, Kosuke Sato, Go Kamoda, Ryosuke Takahashi, Yuji Yamamoto, **Daiki Shiono**, Keisuke Sakaguchi, Goro Kobayashi. “It’s Not RoPE That Creates Sinks: The Role of Self-Concentration and Value-Non-Mixing in Attention.” *Proceedings of the 2026 Conference on Empirical Methods in Natural Language Processing (EMNLP 2026)*, Budapest, Hungary, October 2026.

[Link to Paper](#) [Code](#)

Futa Waseda, Shojiro Yamabe, **Daiki Shiono**, Kento Sasaki, Tsubasa Takahashi. “Read or Ignore? A Unified Benchmark for Typographic-Attack Robustness and Text Recognition in Vision-Language Models.” *Proceedings of the European Conference on Computer Vision (ECCV 2026)*, Malmö, Sweden, September 2026.

[Link to Paper](#) [Project](#) [Dataset](#) [Code](#)

Shojiro Yamabe, Futa Waseda, **Daiki Shiono**, Tsubasa Takahashi. “Text-Printed Image: Bridging the Image-Text Modality Gap for Text-centric Training of Large Vision-Language Models.” *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR 2026)*, Denver, USA, June 2026. **CVPR Compute Gold Star Award**.

[Link to Paper](#) [Poster](#)

Keishi Ishihara*, Kento Sasaki*, Tsubasa Takahashi, **Daiki Shiono**, Yu Yamaguchi (*equal contributions). “STRIDE-QA: Visual Question Answering Dataset for Spatiotemporal Reasoning in Urban Driving Scenes.” *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI 2026)*, Singapore, January 2026.

[Link to Paper](#) [Project](#) [Training Data](#) [Benchmark](#) [Code](#)

Ko Yoshida, **Daiki Shiono**, Kai Sato, Toko Miura, Momoka Furuhashi, Jun Suzuki. “Batch-wise Convergent Pre-training: Step-by-Step Learning Inspired by Child Language Development.” *Proceedings of the First BabyLM Workshop*, Association for Computational Linguistics, Suzhou, China, pp.508–524, November 2025.

[Link to Paper](#)

Daiki Shiono, Ana Brassard, Yukiko Ishizuki, Jun Suzuki. “Evaluating Model Alignment with Human Perception: A Study on Shitsukan in LLMs and LVLMs.” *Proceedings of the 31st International Conference on Computational Linguistics (COLING 2025)*, Abu Dhabi, UAE, January 2025.

[Link to Paper](#) [Dataset](#) [Code](#)

Daiki Shiono, Shumpei Miyawaki, Ryota Tanaka, Jun Suzuki. “Instruction-Following Evaluation for Large Vision-Language Models.” *Non-archival submission for the 2024 Conference of the North American Chapter of the Association for Computational Linguistics Student Research Workshop (NAACL SRW 2024)*, Mexico City, Mexico, June 2024.

Ryohei Kamei, **Daiki Shiono**, Reina Akama, Jun Suzuki. “Detecting Response Generation Not Requiring Factual Judgment.” *Proceedings of the 2024 Conference of the North American Chapter of the Association for Computational Linguistics Student Research Workshop (NAACL SRW 2024)*, Mexico City, Mexico, June 2024.

[Link to Paper](#)

Yukiko Ishizuki*, **Daiki Shiono***, Ana Brassard, Jun Suzuki (*equal contributions). “Exploring Large Language Models’ Understanding of Shitsukan.” *Non-archival submission for the 18th Conference of the European Chapter of the Association for Computational Linguistics Student Research Workshop (EACL SRW 2024)*, Malta, March 2024.

Domestic Conference Presentations

Daiki Shiono, Shingo Yokoi, Shintaro Inuzuka, Tsubasa Takahashi, Jun Suzuki, Yu Yamaguchi. “MOMIJI: 日本語大規模インターリーブ視覚言語データセット.” *言語処理学会第 32 回年次大会 (NLP 2026)*, pp.717–722, March 2026.

[Link to Paper](#)

Kazuki Inomata, Haruto Yoshida, **Daiki Shiono**, Reina Akama, Keisuke Sakaguchi. “JCuisines: 日本の地域文化の理解にむけた郷土料理視覚言語ベンチマーク.” 言語処理学会第 32 回年次大会 (**NLP 2026**), pp.711–716, March 2026.
[Link to Paper](#)

Satoki Ohashi, Raito Kiya, Kosuke Sato, Ryosuke Takahashi, Go Kamoda, Yuji Yamamoto, **Daiki Shiono**, Keisuke Sakaguchi, Goro Kobayashi. “注意機構における Attention Sink のバイアス項的解釈.” 言語処理学会第 32 回年次大会 (**NLP 2026**), pp.2591–2596, March 2026. **Young Researcher Encouragement Award**.
[Link to Paper](#)

Raito Kiya, Satoki Ohashi, Kosuke Sato, Go Kamoda, Ryosuke Takahashi, Yuji Yamamoto, **Daiki Shiono**, Keisuke Sakaguchi, Goro Kobayashi. “Attention Sink および Massive Activation の発生機序の分解.” 言語処理学会第 32 回年次大会 (**NLP 2026**), pp.2579–2584, March 2026. **Young Researcher Encouragement Award**.
[Link to Paper](#)

Keito Kudo, Masatoshi Hidaka, **Daiki Shiono**, Go Kamoda, Mengyu Ye, Ryosuke Takahashi, Yoichi Aoki, Kazuki Yano, Masaya Taniguchi, Takumi Ito, Keisuke Sakaguchi, Jun Suzuki. “チーム dentaku FT-LLM 2026 (数学タスク) システム解説.” *The Second Workshop on Fine-Tuning and Evaluation of Large Language Models* (**FT-LLM 2026**), Utsunomiya, Tochigi, March 2026. **1st Place (Open Division), 2nd Place (Overall)**.
[Link to Paper](#) [Poster](#) [Slides](#) [Models/Datasets](#) [Code](#)

Ko Yoshida, **Daiki Shiono**, Kai Sato, Momoka Furuhashi, Toko Miura, Jun Suzuki. “バッチ単位収束型事前学習：子どもの言語発達に着想を得た一歩ずつの学習.” NLP 若手の会第 20 回シンポジウム (**YANS 2025**), August 2025. **Encouragement Award**.

Daiki Shiono, Ryota Tanaka, Shumpei Miyawaki, Keito Kudo, Jun Suzuki. “Padding vs. Packing: 大規模言語モデルのファインチューニングにおける学習効果の検証.” 言語処理学会第 31 回年次大会 (**NLP 2025**), pp.1698–1703, March 2025.
[Link to Paper](#)

Ryosuke Matsuda, **Daiki Shiono**, Ana Brassard, Jun Suzuki. “大規模視覚言語モデルの質感知覚能力の分析.” 言語処理学会第 31 回年次大会 (**NLP 2025**), pp.2550–2555, March 2025.
[Link to Paper](#)

Keito Kudo, Go Kamoda, **Daiki Shiono**, Jun Suzuki. “日本語バイト符号化マスク言語モデルの開発と分析.” 言語処理学会第 31 回年次大会 (**NLP 2025**), pp.3356–3361, March 2025.
[Link to Paper](#)

Daiki Shiono, Shumpei Miyawaki, Ryota Tanaka, Jun Suzuki. “大規模視覚言語モデルに関する指示追従能力の検証.” 言語処理学会第 30 回年次大会 (**NLP 2024**), pp.2057–2062, March 2024. **Committee Special Award**.
[Link to Paper](#)

Ryohei Kamei, **Daiki Shiono**, Reina Akama, Jun Suzuki. “事実正誤判定が不要な生成応答の検出に向けたデータセットの収集と分析.” 言語処理学会第 30 回年次大会 (**NLP 2024**), pp.2125–2130, March 2024.
[Link to Paper](#)

Ryohei Kamei, **Daiki Shiono**, Reina Akama, Jun Suzuki. “生成応答に含まれる事実に基づかない情報の自動検出の試み.” NLP 若手の会第 18 回シンポジウム (**YANS 2023**), August 2023. **Encouragement Award, CyberAgent Award**.

Daiki Shiono, Shumpei Miyawaki, Haruki Nagasawa, Jun Suzuki. “画像キャプションを利用した IconQA タスクへのアプローチ.” 言語処理学会第 29 回年次大会 (**NLP 2023**), pp.1857–1862, March 2023.
[Link to Paper](#)

Shoji Moriya*, **Daiki Shiono***, Yosuke Kishinami, Riki Fujihara, Subaru Kimura, Yuta Matsumoto, Shusaku Sone, Reina Akama, Jun Suzuki, Kentaro Inui (*equal contributions). “aoba_v3 bot: 多様な応答生成モデルとルールベースを統合したマルチモーダル雑談対話システム.” 人工知能学会音声・言語理解と対話処理研究会第 96 回研究会 (**JSAI SIG-SLUD 96**) 第 13 回対話システムシンポジウム, December 2022. **Excellence Award, 2nd Place, Open Track, 5th Dialogue System Live Competition.**

[Link to Paper](#)

Book

Shuhei Kurita, Seitaro Shinagawa, Rintaro Yanagi, **Daiki Shiono**, Shinnosuke Takamichi, Daisuke Niizumi, Tomohiko Nakamura, Takuma Yagi, Takayuki Shinohara. “**マルチモーダルモデル入門 (Introduction to Multimodal Models)**.” Gijutsu-Hyoron Co., Ltd., September 28, 2026. ISBN 978-4-297-15836-1.

[Amazon](#) [Publisher](#)

Awards

1st Place (Open Division), 2nd Place (Overall), [FT-LLM2026 Math Task](#) (March 2026).

Committee Special Award, 30th Annual Meeting of the Association for Natural Language Processing (**NLP 2024**) (26/567 submissions, $\approx 4.59\%$) (March 2024).

Excellence Award (2nd Place), Open Track, 5th Dialogue System Live Competition (December 2022).

Talks

“Large Vision-Language Models: How They See, Pass, and Answer.”

NLIP Seminar Series, Department of Computer Science and Technology, University of Cambridge. October 2026.

[Link to Seminar Page](#)

“Words or Vision: Do Vision-Language Models Have Blind Faith in Text? (CVPR 2025).”

The 17th Saisentan NLP Study Group ([SNLP 2025](#)). August 2025.

[Link to Presentation Materials](#)

Skills

Software & Tools Python, PyTorch, Transformers, Linux, Docker, Singularity.