

Hafsteinn Einarsson

Curriculum Vitae (full)

hafsteinne@hi.is · ORCID 0000-0001-5072-3678 · Scholar · haffi112.github.io/

RESEARCH STATEMENT

My PhD at ETH Zurich centred on mathematical models of neural systems, drawing on probability theory, distributed computing, and differential equations. After a postdoc in systems neuroscience and two years as a data scientist in banking, I joined the University of Iceland in 2020 and built a research group on natural-language processing for low-resource languages, with a focus on Icelandic and other North-Germanic languages. My group has contributed Icelandic language models, methods for automated clinical coding, gender-bias evaluation for morphologically gendered languages, sentiment annotation for Icelandic blog comments, and machine-translation resources for Faroese.

CURRENT POSITIONS

2020–present	Associate Professor in Computer Science , University of Iceland, Faculty of Industrial Engineering, Mechanical Engineering and Computer Science, Iceland
2021–present	Research Scientist , deCODE genetics, Iceland

PREVIOUS POSITIONS

2024–present	Co-founder , KatlaCode, Iceland
2019–2023	Co-founder , Prescriby, Iceland
2018–2020	Data Scientist , Íslandsbanki, Iceland
2017–2018	Postdoctoral Researcher , Institute of Neuroinformatics, ETH Zurich, Switzerland

EDUCATION

2017	PhD in Computer Science , ETH Zurich, Switzerland. <i>Fast Emergence of Neural Structures</i> . Prof. Angelika Steger
2013	MSc in Computer Science , ETH Zurich, Switzerland.
2011	BSc in Mathematics , University of Iceland, Iceland.

AWARDS AND GRANTS

2026	Visindi og velferð — Grant for developing an app for science literacy, 700k ISK
2026	Microsoft Lingua — Grant for developing LLM red-teaming datasets for Icelandic (Microsoft), 50k USD
2024	Science Award, University of Iceland — Best overall science work and best in health science (for ICD-10 coding using Icelandic BERT models)
2023–present	TrustLLM — EU-funded project on language models for Germanic languages (Horizon Europe)
2022	Neologism platform for Icelandic (University of Iceland), 4M ISK
2021	Incentive Award, University of Iceland — For QA models for Icelandic (supervised student project)
2020–2021	Sproti and Vöxtur — Awarded to Prescriby for digital product development (Icelandic Centre for Research (Rannís)), 90M ISK total
2020	Digital literacy course development (University of Iceland), 3M ISK
2017	Early Postdoc Mobility Fellowship (declined) (Swiss National Science Foundation)
2010	Summer Undergraduate Research Fellowship (SURF) (California Institute of Technology)

SUPERVISION

PhD students (main supervisor) — 3

Annika Simonsen — TrustLLM: aligning language models for Germanic languages
Joao Rodrigo Da Silva Martins — PhD with the Marine and Freshwater Research Institute, Iceland
Steinunn Rut Friðriksdóttir — Mitigating prejudice in language models

PhD committee — 7

Amir Hamedpour — Multispectral imaging of subarctic grasslands
Andrea Raket Sigurðardóttir — Multispectral imaging
Bjarki Ármannsson
Isidora Glisic
Pétur Helgi Einarsson
Sindri Emmanúel Antonsson
Pór Sverrisson

Master's theses completed — 10

2025 **Alexander Guðmundsson** — Evaluating Speech Technology Integration in Children's Reading Education
2025 **Joao Rodrigo Da Silva Martins** — Fish Species Classification in Controlled Underwater Environments Using Contrastive Language-Image Models · PhD with the Marine and Freshwater Research Institute, Iceland
2024 **Haraldur Orri Hauksson** — ICD-10 classification for Icelandic
2023 **Annika Simonsen** — Improving Machine Translation for Faroese using ChatGPT-Generated Parallel Data · Now my PhD student
2023 **Atli Snær Ásmundsson** — Sentiment analysis with IceBERT for Icelandic blogs
2023 **Hrafnhildur Hauksdóttir** — Heart failure pharmacotherapy after discharge at Landspítali
2023 **Pór Sverrisson** — Abstractive summarization for Icelandic · PhD at University of Iceland
2022 **Andrea Raket Sigurðardóttir** — Few-shot nematode detection with multi-spectral imaging · PhD at University of Iceland
2022 **Kim Cosmo Ström** — Drawing Music
2021 **Vésteinn Snæbjarnarson** — QA method for Icelandic · PhD at University of Copenhagen and ETH Zurich

Current master's students — 2

Margrét Snorradóttir — Sköpunargáfa og ADHD
Steinar Bragi Sigurðarson — Gervigreindarknúin bókameðmæli fyrir börn

TEACHING

Roughly 300+ students per academic year across these courses.

MSc **The AI Lifecycle** — Master's course developed and taught by Hafsteinn on the full lifecycle of an applied AI project: framing the problem, sourcing and curating data, model selection and evaluation, deployment, and post-deployment monitoring. Students work on team projects that take an idea through every stage from specification to a deployed prototype.

MSc **Introduction to Deep Learning** — Master's introduction to deep learning: from the basics of feed-forward networks and back-propagation through modern architectures, with a focus on practical implementation in PyTorch. Includes coverage of convolutional networks, recurrent and attention models, and the basics of training large models. Taught in English.

MSc **Large Language Models in an Icelandic Context** — Master's course co-taught at the School of Humanities on the use of large language models for Icelandic. Covers what current models can and cannot do for an under-resourced language, evaluation and bias considerations, and practical work with Icelandic-language models and datasets developed at the University of Iceland. Taught in Icelandic.

MSc	Natural Language Processing (Business Intelligence module) — NLP module taught as part of the Business Intelligence master's programme at the School of Business. Covers the practical NLP toolkit modern analysts need: text preprocessing, embeddings, classification, named-entity recognition, and the use of large language models for business applications. Taught in English.
BSc / MSc	Analysis of Algorithms — Bridge course between the BA and MSc programmes in computer science. Algorithm design and analysis with an emphasis on asymptotic complexity, divide-and-conquer, greedy methods, dynamic programming, graph algorithms, and the basics of NP-completeness. Taught in English.
BSc	Computers, Operating Systems and Digital Literacy — Introductory BA course developed in 2020 covering computer organisation, operating systems fundamentals, and the practical digital-literacy skills students need across the rest of the degree. Designed for a mixed Icelandic and international audience.
BSc	Discrete Mathematics for Computer Science — Foundational discrete math course for first-year computer science students. Covers logic and proof techniques, set theory, combinatorics, graphs, recurrences, and an introduction to probability on discrete sample spaces. Taught at the University of Iceland Department of Computer Science with a mixed Icelandic and international cohort.

OPEN-SOURCE PROJECTS

active	FoQA — The first dedicated question-answering dataset for Faroese, with extractive and generative variants. Built through translation and adaptation of existing QA benchmarks combined with native-speaker validation, and accompanied by baseline evaluations of multilingual and Faroese-tuned language models. Released alongside the RESOURCEFUL 2025 paper.
maintenance	GameQA — A gamified mobile-app platform for crowdsourcing multi-domain question-answering datasets. Demonstrated at EACL 2023 System Demonstrations and used to collect the RUQuAD-1 reading-comprehension dataset for Icelandic.
maintenance	Hotter and Colder — An Icelandic sentiment corpus of blog comments annotated with nuanced labels for sentiment, emotions, toxicity, sarcasm, hate speech, sympathy, and related categories. Distributed via the University of Iceland, with the companion methodology paper at NoDaLiDa / Baltic-HLT 2025.
maintenance	IceBERT family — A family of Icelandic BERT-style language models pre-trained on the Icelandic Crawled Corpus. Released alongside the LREC 2022 paper with Miðeind, the IceBERT checkpoints have become the foundation for much of the subsequent Icelandic NLP work in our group and elsewhere.
maintenance	Icelandic WinoGrande — An Icelandic adaptation of the WinoGrande commonsense-reasoning benchmark, built to evaluate Icelandic language models on pronoun disambiguation and world-knowledge tasks. Released by Miðeind ehf.
active	MazeEval — A benchmark for testing sequential decision-making in language models through navigation tasks in procedurally generated mazes. Single-author preprint with the benchmark released alongside the paper.
maintenance	MIM-GOLD-EL — An entity-linking corpus for Icelandic built on top of the MIM-GOLD named-entity collection. Released with the University of Iceland and introduced at LREC 2022; the companion methodology paper appeared at the Dataset Creation for Lower-Resourced Languages workshop.

maintenance	NQil - Natural Questions in Icelandic — An open-domain question-answering dataset for Icelandic, adapted from the English Natural Questions benchmark. Released in two versions (v1.0 at LREC 2022 and an updated v1.1) and distributed through the University of Iceland for evaluating Icelandic QA systems.
maintenance	RUQuAD-1 — The Reykjavik University Question-Answering Dataset for Icelandic, a SQuAD-style reading-comprehension benchmark collected through the GameQA mobile platform. Distributed via the University of Iceland.

TALKS AND OUTREACH

2025	Teachers' attitudes and perceptions of AI usefulness in academia , ICERI 2025
2025	University of Iceland teachers' attitudes and experience with generative AI , Menntakvika 2025, Reykjavik, Iceland
2023	Talk at the University of Akureyri teaching conference , University of Akureyri teaching conference, Akureyri, Iceland
2023	Talk at the Icelandic teaching academy conference , Icelandic Teaching Academy conference
2023	Talk on AI and ethics , UNESCO forum on AI and Ethics
2022	UTmessan 2022 , UTmessan, Reykjavik, Iceland
2021	Nationally broadcast interview on AI , RÚV (Icelandic National Broadcaster), Reykjavik, Iceland
2021	UTmessan 2021 , UTmessan, Reykjavik, Iceland

SERVICE

Reviewing (selected):

2024	ACL Rolling Review
2023	Animals
2023	Sensors
2023	Applied Sciences
2022	LREC workshops
2021	NeurIPS workshops
2020–2021	Machine Learning (Springer)
2018	COSYNE
2018	Hippocampus
2017	SIROCCO

Roles:

2020–present	President , Association of Computer Scientists in Iceland
2019–2020	Committee member , SKÝ committee on data applications
2013–2016	Board member, vice-president, president , VMI (Association of scientific staff, CS Department, ETH Zurich)

COLLABORATIONS

Academic

- Marine and Freshwater Research Institute of Iceland (otolith age reading, fish species classification)
- TrustLLM partners (Faroese, German and other European groups)
- University of Copenhagen
- ETH Zurich
- deCODE genetics
- Faculty of Food Science, University of Iceland
- Landspítali (Icelandic National Hospital) — clinical coding and heart-failure pharmacotherapy

Industry / practice

- VideometerLab — multispectral image analysis for nematode detection
- Horseday — horse gait detection from smartphone recordings

ALL PUBLICATIONS BY THEME

NLP for Icelandic and Germanic languages

- 2025 Arnardóttir, Þ., Einarsson, E. B., Juto, G. I., Helgason, T. P., Einarsson, H. (2025). **Wikiqa-is: Assisted benchmark generation and automated evaluation of icelandic cultural knowledge in llms.** *Proceedings of the third workshop on resources and representations for under-resourced languages and domains (RESOURCEFUL-2025).*
- 2025 Chang, T. A., Arnett, C., Eldesokey, A., Sadallah, A., Kashar, A., Daud, A., Olanihun, A. G., Mohammed, A. L., Praise, A., Sharma, A. M., others (2025). **Global piqa: Evaluating physical commonsense reasoning across 100+ languages and cultures.** *arXiv preprint arXiv:2510.24081.*
- 2025 Einarsson, H. (2025). **MazeEval: a benchmark for testing sequential decision-making in language models.** *arXiv preprint arXiv:2507.20395.*
- 2025 Einarsson, H., Simonsen, A., Nielsen, D. S. (2025). **Proceedings of the 1st workshop on nordic-baltic responsible evaluation and alignment of language models (NB-REAL 2025).** *Proceedings of the 1st workshop on nordic-baltic responsible evaluation and alignment of language models (NB-REAL 2025).*
- 2025 Friðriksdóttir, S. R., Nielsen, D. S., Einarsson, H. (2025). **Hotter and colder: a new approach to annotating sentiment, emotions, and bias in icelandic blog comments.** *Proceedings of the joint 25th nordic conference on computational linguistics and 11th baltic conference on human language technologies (NoDaLiDa/baltic-HLT 2025).*
- 2025 Scalvini, B., Simonsen, A., Debess, I. N., Einarsson, H. (2025). **Prompt engineering enhances Faroese MT, but only humans can tell.** *Proceedings of the joint 25th nordic conference on computational linguistics and 11th baltic conference on human language technologies (NoDaLiDa/baltic-HLT 2025).*
- 2025 Scalvini, B., Debess, I. N., Simonsen, A., Einarsson, H. (2025). **Rethinking low-resource MT: the surprising effectiveness of fine-tuned multilingual models in the LLM age.** *Proceedings of the joint 25th nordic conference on computational linguistics and 11th baltic conference on human language technologies (NoDaLiDa/baltic-HLT 2025).*
- 2025 Schram, Á. B., Jóhannesdóttir, S., Einarsson, H., Bjarnadóttir, M. K. (2025). **Áskoranir og tækifæri með notkun gervigreindar í háskólastarfi: Raddir kennara og hlutverk háskóla.** *Frumrannsókn á viðhorfi og reynslu kennara við HÍ. Menntakvika 2025: Ráðstefna í menntavísindum.*
- 2025 Schram, Á., Jóhannesdóttir, S., Einarsson, H., Bjarnadóttir, M. K., Rogers, B. L. (2025). **Teachers' attitudes and perceptions of the usefulness of ai in academia: How should universities respond to a changing educational landscape?.** *ICERI2025 proceedings.*
- 2025 Simonsen, A., Nielsen, D. S., Einarsson, H. (2025). **FoQA: A Faroese question-answering dataset.** *Proceedings of the third workshop on resources and representations for under-resourced languages and domains (RESOURCEFUL-2025).*
- 2024 Arnardóttir, Þ., Ingólfssdóttir, S. L., Símonarson, H. B., Einarsson, H., Ingason, A. K., Þorsteinsson, V. (2024). **Beyond error categories: A contextual approach of evaluating emerging spell and grammar checkers.** *Proceedings of the 3rd annual meeting of the special interest group on under-resourced languages@ LREC-COLING 2024.*
- 2024 Arnardóttir, Þ., Ingólfssdóttir, S. L., Ingvarsson Juto, G., Símonarson, H. B., Einarsson, H., Ingason, A. K., Þorsteinsson, V. (2024). **Icelandic GPT-SW3 for spell and grammar checking.** *Miðeind ehf.*
- 2024 Debess, I. N., Simonsen, A., Einarsson, H. (2024). **Good or bad news? Exploring GPT-4 for sentiment analysis for faroese on a public news corpora.** *Proceedings of the 2024 joint international conference on computational linguistics, language resources and evaluation (LREC-COLING 2024).*
- 2024 Einarsson, H., Lund, S. H., Jónsdóttir, A. H. (2024). **Application of ChatGPT for automated problem reframing across academic domains.** *Computers and Education: Artificial Intelligence.*
- 2024 Einarsson, H., Friðriksdóttir, S. R., Arnardóttir, Þ. (2024). **Icelandic sentiment corpus (hotter and colder).** *Háskóli Íslands.*

- 2024 Friðriksdóttir, S. R., Einarsson, H. (2024). **Gendered grammar or ingrained bias? exploring gender bias in Icelandic language models.** *Proceedings of the 2024 joint international conference on computational linguistics, language resources and evaluation (LREC-COLING 2024).*
- 2024 Friðriksdóttir, S. R., Simonsen, A., Ásmundsson, A. S., Friðjónsdóttir, G. L., Ingason, A. K., Snæbjarnarson, V., Einarsson, H. (2024). **Ice and fire: Dataset on sentiment, emotions, toxicity, sarcasm, hate speech, sympathy and more in Icelandic blog comments.** *Proceedings of the fourth workshop on threat, aggression & cyberbullying@ LREC-COLING-2024.*
- 2024 Kristjánisdóttir, I. J., Einarsson, H., Ingason, A. K. (2024). **Improving phrase structure parsing for Icelandic.** .
- 2024 Simonsen, A., Einarsson, H. (2024). **A human perspective on GPT-4 translations: Analysing Faroese to English news and blog text translations.** *Proceedings of the 25th annual conference of the European Association for Machine Translation (volume 1).*
- 2023 Eggertsson, V. Á., Jóhannesson, B. G., Einarsson, H., Loftsson, H. (2023). **Effective entity disambiguation in low-resource languages: a study of Icelandic.** *2023 IEEE/WIC International Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT).*
- 2023 Friðriksdóttir, S., Einarsson, H. (2023). **The effect of data encoding on relation triplet identification.** *Proceedings of the 24th Nordic Conference on Computational Linguistics (NoDaLiDa).*
- 2023 Skarphedinsson, N., Gudmundsson, B., Smari, S., Larusdottir, M. K., Einarsson, H., Khan, A., Nyberg, E., Loftsson, H. (2023). **GameQA: Gamified mobile app platform for building multiple-domain question-answering datasets.** *Proceedings of the 17th conference of the European chapter of the Association for Computational Linguistics: System Demonstrations.*
- 2023 Sverrisson, P., Einarsson, H. (2023). **Abstractive text summarization for Icelandic.** *Proceedings of the 24th Nordic Conference on Computational Linguistics (NoDaLiDa).*
- 2022 Einarsson, H., Friðriksdóttir, S. R. (2022). **Bootstrapping Icelandic knowledge graph data.** *ESSLLI.*
- 2022 Friðriksdóttir, S. R., Einarsson, H. (2022). **Fictionary-based games for language resource creation.** *Proceedings of the 2nd workshop on novel incentives in data collection from people: models, implementations, challenges and results within LREC 2022.*
- 2022 Friðriksdóttir, S. R., Einarsson, H. (2022). **Friðriksdóttir & Einarsson (2022), bootstrapping Icelandic knowledge graph data.** *University of Amsterdam/ Amsterdam University of Applied Sciences.*
- 2022 Friðriksdóttir, S. R., Danielsson, H., Eggertsson, V., Jóhannesson, B. G., Loftsson, H., Einarsson, H. (2022). **MIM-GOLD-EL-entity linking corpus for Icelandic (22.01).** *University of Iceland.*
- 2022 Skarphéðinsson, N., Guðmundsson, B., Smári, S., Lárusdóttir, M., Einarsson, H., Kahn, A., Nyberg, E., Loftsson, H. (2022). **Reykjavik University Question-Answering Dataset 1 (RUQuAD-1)-version 22.02.** *Reykjavik University.*
- 2022 Snæbjarnarson, V., Einarsson, H. (2022). **Cross-lingual QA as a stepping stone for monolingual open QA in Icelandic.** *Proceedings of the workshop on multilingual information access (MIA).*
- 2022 Snæbjarnarson, V., Símonarson, H. B., Ragnarsson, P. O., Ingólfssdóttir, S. L., Jónsson, H. P., Þorsteinsson, V., Einarsson, H. (2022). **Icelandic WinoGrande v1.0. Miðeind ehf.**
- 2022 Snæbjarnarson, V., Einarsson, H. (2022). **Natural questions in Icelandic.** *Proceedings of the thirteenth language resources and evaluation conference.*
- 2022 Snæbjarnarson, V., Einarsson, B. T. T., Auðunardóttir, I. I., Sæmundsson, U. I., Bjarnadóttir, H., Gunnarsson, H. V., Einarsson, H. (2022). **NQil v. 1.1.** *Háskóli Íslands.*

- 2022 Snæbjarnarson, V., Símonarson, H. B., Ragnarsson, P. O., Ingólfssdóttir, S. L., Jónsson, H., Þorsteinsson, V., Einarsson, H. (2022). **A warm start and a clean crawled corpus-a recipe for good language models.** *Proceedings of the thirteenth language resources and evaluation conference.*
- 2022 Steinunn Rut Friðriksdóttir, B. G. J., Einarsson, H. (2022). **Building an icelandic entity linking corpus.** *Proceedings of the workshop on dataset creation for lower-resourced languages within the 13th language resources and evaluation conference.*
- n. d. Friðriksdóttir, S. R., Einarsson, H. (n.d.). **Detecting biased language in icelandic: a named entity recognition approach for socially responsible text analysis.** *Workshop on socially responsible language modelling research.*

Computer vision for natural sciences

- 2025 Silva Martins, J. R., Bárðarson, H., Guðbrandsson, J., Einarsson, H. (2025). **Temporal aggregation of vision-language features for high-accuracy fish classification in automated monitoring.** *Ecological Informatics.*
- 2025 Hrólfsdóttir, A. Þ., Sigurðardóttir, A. R., Sveinsdóttir, H. I., Arason, S., Schultz, N., Einarsson, H., Gudjónsdóttir, M. (2025). **Multispectral imaging techniques for evaluating physicochemical-, antioxidant, and sensory properties of *Alaria esculenta* and *Saccharina latissima*.** *Algal Research.*
- 2025 Sigurðardóttir, A. R., Sveinsdóttir, H. I., Schultz, N., Einarsson, H., Gudjónsdóttir, M. (2025). **Multispectral imaging as a predictive tool for freshness of whole Atlantic cod: Compared with sensory, chemical and microbiological analysis.** *Applied Food Research.*
- 2024 Sigurðardóttir, A. R., Sveinsdóttir, H. I., Schultz, N., Einarsson, H., Gudjónsdóttir, M. (2024). **Sequence segmentation of nematodes in atlantic cod with multispectral imaging data.** *Foods.*
- 2023 Davíðsson, H. B., Rees, T., Ólafsdóttir, M. R., Einarsson, H. (2023). **Efficient development of gait classification models for five-gaited horses based on mobile phone sensors.** *Animals.*
- 2023 Hamedpour, A., Sigurdsson, B. D., Peñuelas, J., Filella, I., Einarsson, H., Latré, S., Stefánsson, T. (2023). **Analyzing the effect of the duration of soil warming on subarctic grasslands using high-resolution multispectral images.** *EGU general assembly conference abstracts.*
- 2023 Sigurðardóttir, A. R., Sverrisson, Þ., Jónsdóttir, A., Gudjónsdóttir, M., Elvarsson, B. Þ., Einarsson, H. (2023). **Otolith age determination with a simple computer vision based few-shot learning method.** *Ecological Informatics.*
- 2022 Hamedpour, A., Sigurdsson, B. D., Penuelas, J., Filella, I., Einarsson, H., Latré, S., Stefánsson, T. (2022). **Drought response analysis on a geothermally warmed Sub-Arctic grassland ecosystem using multispectral drone images.** *16th international circumpolar remote sensing symposium.*

Clinical AI and cardiology

- 2026 Ingimarsdóttir, I. J., Saldarriaga, C., Nielsen, N. C., Einarsson, H., Goldfeder, S., Mewton, N., Barasa, A., Basic, C., Oerlemans, M. I., Niederseer, D., others (2026). **The impact of country income level on the management of heart failure with preserved ejection fraction: an international survey.** *ESC Heart Failure.*
- 2026 Myhre, P. L., Lindberg, F., Løgstrup, B. B., Ingimarsdóttir, I. J., Vistnes, M., Schjødt, I., Ljungman, C., Savarese, G., Dridi, N. P., Einarsson, H., others (2026). **Enhancing heart failure care through registries: lessons learned from Nordic Countries' implementation of guidelines.** *European Journal of Heart Failure.*
- 2025 Bergmann, H. M., Úlfarsson, Æ. Ö., Einarsson, H., Jóhannsdóttir, H. X., Gunnarsson, G. T., Hrafnkelsdóttir, T. J., Andersen, K., Ingimarsdóttir, I. J. (2025). **Unravelling ATTR cardiac amyloidosis in iceland: a nationwide epidemiological study.** *Cardiology.*
- 2025 Gudjonsson, P., Andersen, K., Einarsson, H., Ingimarsdóttir, I. (2025). **Survival impact of amiodarone therapy in heart failure: insights from the Icelandic Heart Failure registry.** *European Heart Journal.*

- 2025 Guidetti, F., Giraldo, C. I. S., Shchendrygina, A., Kida, K., Niederseer, D., Basic, C., Rainer, P. P., Załęska-Kocięcka, M., Ogola, E., Mohty, D., others (2025). **Differences in heart failure with preserved ejection fraction management between care providers: an international survey.** *European Journal of Heart Failure.*
- 2025 Gunnthorsdottir, I., Almarsdottir, A. B., Andersen, K., Gunnarsdottir, A. I., Svansdottir, E., Einarsson, H., Ingimarsdottir, I. J. (2025). **Factors influencing medication adherence in heart failure patients—a survey among cardiac healthcare providers.** *Clinical Pharmacology & Therapeutics.*
- 2025 Ingimarsdottir, I. J., Vishram-Nielsen, J. K., Einarsson, H., Goldfeder, S., Mewton, N., Barasa, A., Basic, C., Oerlemans, M. I., Niederseer, D., Shchendrygina, A., others (2025). **Diagnostic and therapeutic practice for HFpEF across continents and regions: An international survey.** *ESC Heart Failure.*
- 2024 Gunnthorsdottir, I., Andersen, K., Almarsdottir, A., Gunnarsdottir, A., Svansdottir, E., Einarsson, H., Ingimarsdottir, I. (2024). **Factors believed by cardiac care professionals to influence medication adherence in heart failure patients.** *European journal of heart failure.*
- 2024 Hauksdottir, H., Einarsson, H., Gunnthorsdottir, I., Gunnarsson, P., Ingimarsdottir, I. (2024). **Real-life management of heart failure: evaluation of medication optimisation in different phenotypes.** *European journal of heart failure.*
- 2024 Hauksson, H. O., Einarsson, H. (2024). **Applications of BERT models towards automation of clinical coding in icelandic.** *Findings of the association for computational linguistics: NAACL 2024.*
- 2024 Ingimarsdottir, I., Vishram-Nielsen, J., Einarsson, H., Goldfeder, S., Mewton, N., Barasa, A., Basic, C., Oerlemans, M., Niederseer, D., Gustafsson, F., others (2024). **Diagnostic and therapeutic practice for heart failure with preserved ejection fraction around the world: an international survey.** *European journal of heart failure.*
- 2024 Ingimarsdóttir, I. J., Hansen, J. S., Bergmann, H. M., Einarsson, H. (2024). **The Icelandic Heart Failure Registry—A nationwide assessment tool for HF care and intervention in HF treatment.** *ESC Heart Failure.*
- 2024 Saldarriaga, C., Gracia, S. S. G., Mejia, M. I. P., Shchendrygina, A., Kida, K., Fauvel, C., Zaleska-Kociecka, M., Mapelli, M., Einarsson, H., Guidetti, F., others (2024). **Diagnostic and therapeutic practice for Heart Failure with preserved ejection fraction around the world: An international survey.** *Current problems in cardiology.*
- 2024 Saldarriaga, C., Ines, C., Goldfeder, S., Palacio, M., Shchendrygina, A., Guidetti, F., Vishram-Nielsen, J., Ingimarsdottir, I., Einarsson, H., Kida, K., others (2024). **Diagnostic and therapeutic practices for Heart Failure with preserved ejection fraction around the world: an international survey.** *European journal of heart failure.*
- 2023 Agnarsson, H., Hansen, J., Gunnarsson, D., Einarsson, H., Gunnthorsdottir, I., Ingimarsdottir, I. (2023). **Epidemiology of acute heart failure admissions in Iceland: phenotype distribution and prognostic implications.** *European heart journal.*
- 2023 Gunnarsson, D. Á., Ingimarsdóttir, I. J., Einarsson, H., Snædal, S. (2023). **Acute heart failure: causes and outcomes by stages of chronic kidney disease and heartfailure phenotypes.** *ESC heart failure 2023.*
- Human genetics and computational biology**
- 2025 Einarsson, G., Arnason, H. K., Gísladóttir, R. S., Björnsdóttir, G., Þorgeirsson, T. E., Skuladóttir, A., Walters, G. B., Saevarsdóttir, S., Magnússon, M. K., Halldorsson, G. H., others (2025). **Variant in a taste receptor locus tied to changes in the use of insomnia medication.** *Biological Psychiatry Global Open Science.*

- 2024 Einarsson, G., Thorleifsson, G., Steinthorsdottir, V., Zink, F., Helgason, H., Olafsdottir, T., Rognvaldsson, S., Tragante, V., Ulfarsson, M. O., Sveinbjornsson, G., others (2024). **Sequence variants associated with BMI affect disease risk through BMI itself.** *Nature Communications*.
- 2024 Thorolfsson, R. B., Jonsdottir, A. B., Sveinbjornsson, G., Aegisdottir, H. M., Oddsson, A., Stefansson, O. A., Halldorsson, G. H., Saevarsdottir, S., Thorleifsson, G., Stefansdottir, L., others (2024). **Variants at the interleukin 1 gene locus and pericarditis.** *JAMA cardiology*.
- Computational neuroscience**
- 2019 Einarsson, H., Lengler, J., Mousset, F., Panagiotou, K., Steger, A. (2019). **Bootstrap percolation with inhibition.** *Random Structures & Algorithms*.
- 2018 Einarsson, H., Lengler, J., Gauy, M. M., Meier, F., Mujika, A., Steger, A., Weissenberger, F. (2018). **The linear hidden subset problem for the (1+ 1) EA with scheduled and adaptive mutation rates.** *Proceedings of the genetic and evolutionary computation conference*.
- 2018 Matheus Gauy, M., Lengler, J., Einarsson, H., Meier, F., Weissenberger, F., Yanik, M. F., Steger, A. (2018). **A hippocampal model for behavioral time acquisition and fast bidirectional replay of spatio-temporal memory sequences.** *Frontiers in neuroscience*.
- 2018 Weissenberger, F., Einarsson, H., Matheus Gauy, M., Meier, F., Mujika, A., Lengler, J., Steger, A. (2018). **On the origin of lognormal network synchrony in CA1.** *Hippocampus*.
- 2017 Einarsson, H. (2017). **Fast emergence of neural structures.** *ETH Zurich*.
- 2017 Einarsson, H., Gauy, M. M., Lengler, J., Steger, A. (2017). **A model of fast hebbian spike latency normalization.** *Frontiers in computational neuroscience*.
- 2017 Weissenberger, F., Meier, F., Lengler, J., Einarsson, H., Steger, A. (2017). **Long synfire chains emerge by spike-timing dependent plasticity modulated by population activity.** *International journal of neural systems*.
- 2016 Lengler, J., Mousset, F., Panagiotou, K., Steger, A., Einarsson, H. (2016). **Connectivity thresholds for bounded size rules.** *Annals of Applied Probability*.
- 2014 Einarsson, H., Lengler, J., Steger, A. (2014). **A high-capacity model for one shot association learning in the brain.** *Frontiers in computational neuroscience*.
- n.d. Porter, B. S., Schmidt, R., Bilkey, D. K., Mallei, A., Ieraci, A., Corna, S., Tardito, D., Lee, F. S., Popoli, M., Buckley, M. G., others (n.d.). **Hippocam. .**