Jyri Lehtinen

Speech Technology Innovator | NLU & ASR Specialist | Tech Leader

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Kangasala, Finland

Professional Summary

Visionary speech technology developer with a decade-long track record in building state-of-the-art voice assistant, NLU, and ASR solutions. Combines deep linguistic expertise, advanced coding skills, and cross-industry experience to deliver robust, user-friendly, and locally optimized voice technologies. Recognized for innovative thinking, technical leadership, and the ability to take projects from concept to market. Ready to drive the next generation of Finnish and multilingual voice assistants for global and local enterprises.

Core Competencies

- Speech Recognition (ASR) System Design & Implementation
- Natural Language Understanding (NLU)
- Voice Assistant Product Development
- Multilingual Language Technology
- Machine Learning & Deep Learning (NLP)
- End-to-End Pipeline Development
- Product Management & Team Leadership
- Cross-functional Collaboration (Dev, UX, Business)
- Client Engagement & Solution Consulting
- Market Expansion Strategy (Nordic & Global)

Professional Experience

Cerence AI

- NLU & ASR Developer, Language Team Lead, Finnish Speech Solutions
- 2022–Present

- Led the development of NLU and ASR models for next-generation Finnish-language automotive voice assistants, delivering major advances in accuracy, naturalness, and market fit.
- Collaborated with international teams (product, linguistics, engineering, UX) to build and refine full-stack speech solutions for top automotive brands.
- Drove model adaptation for the unique phonetic and pragmatic demands of the Finnish language, achieving industry-leading user satisfaction and recognition accuracy.
- Contributed to the design of scalable voice assistant pipelines, including dataset creation, annotation, evaluation, and continuous improvement.
- Provided technical leadership, mentoring junior developers and supporting project management across multiple release cycles.

Academic R&D (University of Helsinki, Max Planck Institute, Eötvös Loránd University)

- Computational Linguist & Doctoral Researcher
- 2011–2022

- Designed and executed computational research on Uralic language phylogeny, laying the scientific foundation for innovative methodology and language models in under-resourced languages.
- Developed tools for large-scale linguistic data collection, annotation, and machine learning analysis.
- Published and presented research at international conferences, building recognition in the speech tech and language technology communities.
- Experience working with multidisciplinary research teams and managing international academic collaborations.

Early Experience: Translation, Web & Media Technology

- 2004–2021

- Provided technical and audiovisual translation for global clients, sharpening skills in localization, user experience, and communication across industries.
- Built and maintained web platforms in English and Finnish, gaining early experience in digital product development and client management.

Education

PhD (in progress), University of Helsinki

General Linguistics, Computational Linguistics, Finno-Ugric Languages

Dissertation: Uralic Computational Phylogeny: Inheritance and Contact in Vocabulary Networks (defense expected 2025)

MA, University of Helsinki

General Linguistics (with minors in Computational Linguistics, Cognitive Science, Anthropology)

Grade: eximia cum laude approbatur

Technical Skills

- Programming: Python (advanced), Bash, JavaScript, PHP, SQL (MySQL, SQLite), JSGF (NLU grammars)
- ML/NLP: Transformers (HuggingFace, TurkuNLP), Kaldi, Vosk, spaCy, scikit-learn
- Speech Tech: Whisper, DeepSpeech, Praat, NLU pipeline design, audio data processing
- Dev Tools: Git, Linux, Docker, REST APIs, Agile workflows
- Localization: CAT tools (Trados, Memsource), subtitle editors (Ooona, Aegisub)

Languages

- Finnish (native)
- English (fluent)
- German (proficient)
- Swedish, Hungarian, Estonian, French, Spanish (moderate skills)
- Mandarin Chinese, Japanese, Russian, Swahili (basic skills)

Selected Projects & Achievements

- Finnish ASR & NLU for Automotive: Led the development of a production-grade Finnish voice assistant, currently deployed in leading car brands.
- Open Source Speech Tech: Contributed to open-source language tech tools for Finnish and minority languages; active in international speech tech forums.
- Product Prototyping: Rapidly prototyped speech-driven interfaces for smart devices and mobile apps.
- Industry Presentations: Speaker at speech tech and computational linguistics events.

References

Available upon request.

Portfolio and available at uusilehti.com