

Oline A. Ranum

Centre for Vision, Speech and Signal Processing (CVSSP) · University of Surrey · UK

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- PhD researcher in **sign language processing** (Computer Vision & NLP) at CVSSP, University of Surrey.
- **Master's degree** in Artificial Intelligence with ELLIS Honours & Cum Laude.
- **FNWI Master's Thesis Prize 2025** (University of Amsterdam) & **Amsterdam AI Thesis Award 2024**.
- **Bachelor's degree** in Physics with research internships at **CERN** and **LBNL**.
- Founder of **DeepSign AS** and BliFlink NGO.

Education

Doctor of Philosophy (PhD), University of Surrey, UK 2025 – present

- Sign language processing research at the Centre for Vision, Speech and Signal Processing (CVSSP).
- Global Talent Visa, UK Research and Innovation.

Master of Science (MSc), Artificial Intelligence, University of Amsterdam 2022 – 2024

- ELLIS Honours & Cum Laude.
- Thesis: *3D Awareness, Geometry, and Linguistics in Neural Sign Language Representations*.
- Recipient of the FNWI Master's Thesis Prize and Amsterdam AI Thesis Award.
- Research visit: Universitat Pompeu Fabra, Barcelona.

MSc Astroparticle and Gravitational Physics (partial completion), University of Amsterdam – 2020–2021.

Bachelor of Science (BSc), Physics and Astronomy, University of Oslo 2016 – 2020

Focus: computational physics, mathematics, programming.

BSc International Relations (partial completion), University of Oslo – 2015–2016.

Study Abroad, University of California, Berkeley 2019

Specialization in data-driven astronomy and nuclear engineering.

Summer School, Stellenbosch University 2019

Advanced Nuclear Reactions and Applications in Astrophysics (INTPART).

Research & Projects

University of Amsterdam 2023 – 2024

- [Geometric Multi-View Isolated Sign Recognition](#).
- [3D Motion Capture of Sign Languages](#).
- [SE\(3\)-Equivariant Neural Rendering](#).
- [Steerable Diffusion for Scene Generation](#).

DeepSign AS 2022

- Machine translation methods for Norwegian and Norwegian Sign Language.

CERN – AEgIS Group 2019 – 2020

- Positronium production analysis and detector calibration.

UC Berkeley / LBNL 2019

- Detector calibration and isotope production analysis.
- Classification of white dwarf spectra using the Cannon model.

Experience

- Research Assistant**, University of Surrey / CVSSP 2025 – present
- Sign Language Processing research & data capture
- Researcher**, SignLab Amsterdam 2024
- Automatic annotation of visual phonetics and linguistic interfaces.
- Data Annotator**, Accenture / Apple 2024
- Quality control of datasets used to train LLM systems.
- CEO & Founder**, DeepSign AS 2021 – 2022
- Company management, fundraising, product development.
- CTO & Founder**, BliFlink NGO 2020
- Built an online tutoring platform during COVID-19.

Awards & Grants

- **FNWI Master's Thesis Prize**, University of Amsterdam – 2025
- **Amsterdam AI Thesis Award** – 2024
- **ELLIS Honours Scholarship** (€4,000) – 2023
- **STUD-ENT Research Grant** (€100,000), Norwegian Research Council – 2021

Publications

1. Ranum et al. (2024). *NGT200: Geometric Multi-View Isolated Sign Recognition*. ICML Workshop.
2. Ranum et al. (2024). *3D-LEX v1.0: 3D Lexicons for Sign Languages*. LREC-COLING.
3. Hu et al. (2023). *Joint Multisided Exposure Fairness*. ML Reproducibility Challenge.
4. Rienäcker et al. (2022). *Fiber detector to monitor ortho-Ps formation*. NIM A.

Skills

Programming

Python · C++ · Matlab · SQL

Machine Learning & Vision

PyTorch · TensorFlow · OpenCV · Geometric Deep Learning · Sign Language Processing

Languages

Norwegian (native) · English (fluent) · Dutch (basic)

Norwegian Sign Language (proficient) · Dutch Sign Language (basic) · British Sign Language (Level 1)