Øster Farimagsgade 9, 4 TH.
1353 København K
Denmark
+45 44 12 18 06
ivar.cashin.eriksson@gmail.com

Ivar Cashin Eriksson

Introduction

I am an curious Data Scientist with 6 years of experience applying ML across many industries. I have previous experience as a data science researcher building computer vision models in radiotherapy for cancer treatment. I have a strong mathematical background and perfect GPA. After some time in industry, I am excited to return to academia to further my learning and contribute to AI research.

Selected Work Experience

Researcher within Data Science @ RaySearch Laboratories

- Designed a 3D computer-vision pipeline for automated cancer treatment.
- Built lexicographic dose-optimisation for palliative care. Continuously validated with clinicians.

Keywords: 3D computer vision, uncertainty quantification, probabilistic modelling, latent representation, segmentation, autoencoders, optimisation, healthcare AI

Read more…

Principal Data Scientist @ Valcon

- Led design and development of a real-time multi-modal ML pipeline deployed using Azure ML.
- Mentored junior colleagues and held trainings in xAI and Git.
- Won "People's Choice Award" for exemplary work, leadership, team spirit, and curiosity.

Keywords: Real-time ML, NLP, explainability in AI, MLOps, multi-modal, Azure, Docker, mentoring

Read more…

Education

2015–2020 **Royal Institute of Technology, KTH – Data Science and Engineering**, GPA: 5.0 (out of 5.0)
Master: Statistical Learning and Data Analytics, Bachelor: Engineering Physics. See thesis.

2017–2022 **Stockholm University, SU - Economics**, *Supplementary Bachelor's Degree*

2019–2019 **Swiss Federal Institute of Technology, ETH - Applied Mathematics**, *Exchange*

Solo Side Project

Developing an end-to-end CV system to improve e-commerce navigation by making product images interactive. Works by creating embeddings of products to make them searchable across the webshop.

- Web scraping pipeline to dynamically index all items on a webshop.
- Object detection and classification using YOLOv8 and OpenClip to extract all items.
- Chromium plugin to display interactive links, improving user navigation.

Keywords: Computer vision, object detection, segmentation, semantic embedding, full-stack ML engineering, fine-tuning, web scraping

Read more…

Skills and Other

Technology Python (PyTorch, TensorFlow, SHAP, YOLO, OpenClip), MS Azure (Data Science Associate Certified), Databricks, Azure DevOps, MongoDB, Qdrant, Docker, 3D Printing, Fusion 360.

Language *Native*: English, Swedish. *Intermediate*: Danish.

Personal In my spare time I enjoy working on projects, such as designing and building furniture.

Other Member of Mensa Sweden.

Detailed Work Experience

2024–Present **Data Scientist and Project Manager**, *Signum Life Science*, Copenhagen

At Signum, I maintain and lead development on Kwarts, a next-best-action engine for pharmaceutical sales. Originally built externally, I now own the system, extending it with features like explainable AI in collaboration with UX designers, and supporting its commercialisation by aiding our sales representatives. Kwarts adapts to varied customer data maturity, from rule-based logic to deep learning, and is deployed in AWS for scalability.

I also maintain and improve our pharmaceutical price forecasting model, which helps clients navigate Denmark's fortnightly blind auctions. After stabilising the XGBoost-based system, I am now driving efforts toward a more robust and modern implementation.

Beyond model development, I have also organised an internal week-long hackathon that included up to 40 participants. The event fostered innovation and collaboration, resulting in several new ideas and prototypes.

2022–2024 **Principal Data Scientist**, *Valcon*, Copenhagen

Led data science projects across pharma, energy, IoT, and manufacturing. Mentored junior colleagues, led xAI and Git trainings, and shaped internal practices. Regularly presented to non-technical stakeholders, honing my ability to translate complex ideas clearly.

One project involved training a real-time deep neural network with an advanced custom training pipeline and modular architecture. The training data consisted of natural-language and high dimensional multi-class labels which made for a challenging prediction problem. I was the lead data scientist and architect of the solution and responsible for implementing the end-to-end in-production pipeline.

I was awarded the "Valcon People's Choice Award" for exemplary work, leadership, team spirit, and scientific curiosity.

2021–2022 **Data Scientist**, *Valtech*, Copenhagen

Delivered ML solutions in e-commerce. Built time series forecasts using Facebook Prophet, and applied clustering to behavioural data to support personalisation. Worked closely with business stakeholders to ensure actionable outputs.

2019–2021 **Researcher within Data Science**, *RaySearch Laboratories*, Stockholm

At RaySearch Laboratories, I worked on automating radiotherapy planning using a combination of deep learning, probabilistic modelling, and multi-objective optimisation. I developed a pipeline that extracted latent anatomical features from segmented 3D CT scans using autoencoders, and used these to identify similar patients via a learned similarity metric. Dose-volume histograms and spatial dose distributions were then predicted using sparse Gaussian processes, providing a probabilistic framework for dose planning conditioned on patient geometry. This enabled personalised, data-driven dose estimation and laid the groundwork for more robust automation in treatment.

Alongside this, I redesigned some of RaySearch's lexicographic optimisation algorithms to better reflect clinical decision hierarchies, particularly in palliative care where trade-offs between tumour control and organ sparing are nuanced. I collaborated closely with medical physicists and clinicians throughout, ensuring the models aligned with both oncological standards and practical workflow requirements.

Other Detailed Experience

2025-Present **Solo Project**, *Project iris*

In this personal project I am building an end-to-end computer vision system for making product images on e-commerce sites interactive. The pipeline detects individual items using a YOLOv8 model, and embeds them semantically using OpenCLIP. The embeddings are then compared to support intelligent product linking across all images and products in a web store.

The system includes a full-stack setup with a FastAPI backend, MongoDB for persistence, a Qdrant index for vector search, and a custom-built Chromium plug-in that overlays clickable links directly onto web shop imagery in real-time. The project also includes a dynamic scraping and indexing pipeline for ingesting and structuring product data from arbitrary e-commerce sites.

The project has been a learning opportunity for fine-tuning of deep learning models and practical ML engineering.