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Ivar Cashin Eriksson

Introduction

I am an ambitious Data Scientist with 6 years of experience applying ML across many industries. I have previous experience building computer vision pipelines in radiotherapy for cancer treatment planning, and have collarborated closely with medical professionals in the past. After some time in industry, I am excited to return to academia to further my learning and contribute to AI research.

Selected Work Experience

Data Science Researcher @ 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, 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 2023" for exemplary work, leadership, team spirit, and curiosity.

Keywords: Real-time ML, NLP, interpretability 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*	
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.

- Web scraping pipeline to dynamically index all items on a webshop.
- Object detection and classification using YOLOv8, SAM2, 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, scikit-learn, SHAP, YOLO, SAM2, OpenClip), SQL, HTML, CSS, MS Azure (Data Science Associate Certified), Databricks, AWS, Azure DevOps, MongoDB, FAISS, Docker, NGINX, 3D Printing, Fusion 360, Blender.
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**, *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 internally – extending it with features like explainable AI in collaboration with UX designers, and supporting its commercialisation by contributing to sales material. 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 modern, user-focused version.

Beyond model development, I am also organising an internal week-long hackathon involving up to 40 participants.

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 2023" 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 **Data Science Researcher**, *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 or SAM2 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 FAISS index for fast 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.

Note: Project iris is hosted in a private repository. I am happy to provide access upon request.