Dan Edelstein

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Professional Summary

Versatile AI researcher and engineer with a strong foundation in machine learning theory and implementation across multiple domains. Background in computer vision and autonomous systems provides transferable expertise applicable to various AI research areas including natural language processing, reinforcement learning, and multimodal systems. Published researcher with cross-disciplinary technical skills and international experience across Northern Europe. Experienced in developing production-level software systems and integrating novel technologies.

Education

DTU (Technical University of Denmark)

Copenhagen, Denmark

MSc in Human-Centered Artificial Intelligence, Honors; Current GPA: 11/12 Autumn 2024 - Spring 2026

- Relevant Coursework: Bayesian Machine Learning, Advanced Deep Learning in Computer Vision
- Projects: Robust memorization-free diffusion models Demo

TalTech (Tallinna Tehnikaülikool)

Tallinn, Estonia

BSc in Integrated Engineering, Cum Laude, GPA: 4.9/5

Autumn 2021 - Summer 2024

- Thesis: "Investigation into suitability of millimeter-wave radars for perception on a mobile robotics platform" Grade: 5.0/5.0
- Awards: Cum Laude, XRP Ledger Trust Stipendium Grantee

Aalto University

Helsinki, Finland

Erasmus, GPA: 4.9/5

Autumn 2023 - Summer 2024

- Key Courses: Autonomous Mobile Robotics (MSc), Smart Forestry Robotics (MSc)
- **Projects:** Touch-keyboard sidechannel attack: modelling touch input via inertial multivariate time series

Work Experience

TalTech Autonomous Vehicles Research Group

Tallinn, Estonia

Autonomous Mobility Perception Researcher

Feb 2024 - Aug 2024

- Developed a sensor fusion pipeline that integrates emerging sensor modalities with traditional perception systems, leveraging advanced tooling to elevate autonomous navigation.
- Tech Stack: C++, Python, Robot Operating System (ROS), Docker

Ericsson Tallinn, Estonia

 $Test\ Development\ Digital\ Software\ Engineer$

June 2022 - March 2023

- \bullet Built full-stack internal tool adopted by 100+ engineers for daily use
- \bullet Automated testing and CI/CD processes, cutting test execution time by 12%.
- Tech Stack: C#, Next.js, PostgreSQL, MSSQL, Internal Tooling

Freelance Web Development

New York, NY

Full Stack Web Dev

From 2016

• Engineered full-stack web applications for international clients alongside consulting on existing codebases

Teaching

Quantitative Sustainability 1210X

Copenhagen, Denmark

MSc Teaching Assistant

Jan 2025 - May 2025

• 4 hours/week of in-person teaching for multi-dimensional sustainability-focused data modeling MSc course

Publications

Sensor Test Bench for Autonomous Vehicle Engineering Education

Baltic Mechatronics Symposium 2024

Dan Edelstein, Joona Päivärinne, Pyry Weckman, Oskari Jutila, et al.

Millimeter-Wave Radar Applications in Autonomous Object Detection

Baltic Electronics Conference 2024

Toomas Tahves, **Dan Edelstein**, Mauro Bellone, Raivo Sell

Technical Skills

- $\bullet \ \ \mathbf{Expert} \colon \mathsf{Python} \ (\mathsf{PyTorch}, \ \mathsf{NumPy}, \ \mathsf{Pandas}, \ \mathsf{JAX}, \ \mathsf{OpenCV}, \ \mathsf{HPC/Distributed}), \ \mathsf{L\!\!^AT\!E\!X}$
- Proficient: C#, ROS (1&2), JavaScript/Next.js, Bash
- Intermediate: C++, C, MATLAB
- Familiar: Rust, Prolog
- Technical Competencies
 - Bayesian machine learning, statistical inference, applied probability
 - AI-based perception systems, real-time computer vision pipelines
 - Software systems design, performance optimization, ROS-based robotics
- Languages: English (Fluent), French (Intermediate), Estonian (Improving), Danish (Basic)

Interdisciplinary Interests and Activities

Experimental Video Art, Sculptural Mechatronics

2015 - Present

Exhibits: Esther Art Fair - NYC; NSFW - Göteborg SE; Dom Galerija - Riga LV; EKA Galerii - Tallinn EE