

# Dr. Peet Cremer

\* 27/01/1988

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AI Technical Leader with deep expertise in machine learning theory and enterprise AI strategy. Combines strong analytical foundation with proven experience managing engineering teams (up to 15 developers) and architecting production AI systems. Currently leading enterprise adoption of cutting-edge AI development tools across 100+ engineers while staying deeply hands-on in technical development.

## Work-experience 🏆 KEY TECHNICAL ACHIEVEMENTS

- 🏆 Led enterprise adoption of advanced AI development tools (Cursor, Gemini Code Assist) across 100+ developers with reported significant productivity gains
- 🏆 Pioneered application of computer vision algorithms to automotive perception systems, resulting in 10 patents covering training of radar perception algorithms, data storage, and fleet management
- 🏆 Managed up to 15 developers across multiple teams while maintaining only 2 customer-impacting incidents over 1 year
- 🏆 Architected production ML systems for building industrial knowledge graphs within an enterprise-scale data platform
- 🏆 7 peer-reviewed publications in Statistical Physics demonstrating strong research and analytical capabilities

## 📁 WORK EXPERIENCE

### Principal Engineer – Atlas AI

🏢 COGNITE (Oslo, Norway)

📅 02/2025 - today

Leading technical innovation in AI evaluation and productivity tooling at Cognito's Atlas AI division. Driving the development of comprehensive evaluation frameworks to measure the performance of industrial AI agents and underlying natural language processing tools. **Strategic Role Transition:** Moved from engineering management to hands-on technical leadership to drive AI innovation during this pivotal transformation period. Leading technical strategy for AI evaluation frameworks and enterprise AI adoption.

- **Enterprise AI Evaluation Frameworks Strategy:** Architecting and implementing evaluation systems to measure Atlas AI industrial agents and NLP tools interfacing with Cognito's data platform
- **AI Productivity Tools:** Leading Architected organization-wide adoption of cutting-edge AI development tools including (Cursor, Bolt, Claude Code, Gemini Code Assist, and Model Context Protocol (MCP) servers), expanding usage across 100+ engineers with teams reporting weeks-to-days productivity improvements
- **AI Evaluation Innovation:** Designing comprehensive evaluation frameworks for industrial AI agents and NLP tools interfacing with Cognito's data platform
- **LLM Technical Leadership:** Led benchmarking of state-of-the-art models (Anthropic, OpenAI, Google, DeepSeek) for industrial knowledge graph applications, directly informing Atlas AI architecture decisions. Delivered external benchmark report providing industry insights on LLM performance for industrial AI applications
- **Cross-functional Leadership Collaboration:** Collaborating Coordinated with Legal, Security, and Procurement teams to ensure compliance, risk mitigation, and successful tool rollouts across the engineering organization
- **Strategic Implementation:** Managing Managed end-to-end procurement processes and conducting conducted training sessions to maximize tool adoption and adoption effectiveness

Recognized by CEO Girish Rishi for contributions to AI tooling strategy in company-wide communications and LinkedIn posts in LinkedIn posts for AI tooling strategy leadership and Atlas AI engineering innovation.

### Senior Director of Engineering

🏢 COGNITE (Oslo, Norway)

📅 02/2024 - 2025

Senior Strategic engineering leadership role overseeing multiple teams and strategic initiatives across Cognito's engineering organization. Led both technical excellence and organizational growth during a critical expansion phase, combining organizational growth with AI initiative development. Gained executive perspective on enterprise AI transformation while maintaining technical involvement.

- **Team Leadership Strategic Expansion:** Managed 10-15 developers across multiple teams focusing on data integration, data connectivity, and AI initiatives
- **Global Expansion:** Spearheaded hiring strategy and execution Designed and executed hiring strategy for Cognito's new India Center of Excellence, defining establishing staffing plans and establishing engineering operations in Bengaluru engineering operations for 20+ roles. Contributed to successful inauguration of India Center of Excellence supporting Cognito's global expansion strategy
- **Strategic Product Development Engineering Leadership:** Collaborated on product strategy development for Contextualization services Managed 10-15 developers across data integration, connectivity, and AI initiatives during critical company scaling phase. Maintained only 2 customer-impacting incidents across those team's services over 1 year while scaling teams
- **Product Strategy:** Collaborated on Contextualization services roadmap, aligning technical roadmaps architecture with business objectives
- **Organizational Culture:** Contributed to culture building initiatives and engineering best practices across the broader organization
- **Technical Architecture:** Provided strategic technical guidance on data platforms, ML systems, and engineering workflows

## Director of Engineering

COGNITE (Oslo, Norway)

02/2023 - 02/2024

Engineering management role with dynamic team growth and strategic organizational challenges. Successfully scaled team from 5 to 18 developers while maintaining technical excellence and delivery commitments, focused on people leadership, technical planning, and team development. Stepped up to manage additional teams during organizational transitions when multiple Engineering Managers departed.

- Crisis Management:** Absorbed responsibility for multiple teams during management transitions, scaling from 1 to 3 teams (up to 18 developers) while maintaining delivery commitments and service reliability
- Rapid Team Scaling/Recovery:** Grew engineering organization from 1 team of 5 developers to 3 teams totaling 18 developers at peak, with typical management span of 10-15 direct reports. Transformed inherited struggling team from red-yellow to yellow-green health metrics by enabling Cognite's support team to triage customer requests and creating documented guardrailed escalation processes, significantly reducing engineering team stress
- Technical Focus Areas Leadership:** Led teams specializing in contextualization of industrial data, data-driven troubleshooting applications, and parsing of engineering diagrams
- Organizational Flexibility:** Adapted to fluctuating team structures and filled gaps across multiple initiatives while maintaining one stable core team
- Strategic Leadership:** Balanced aggressive growth targets with quality delivery and team development during a critical expansion phase

Demonstrated ability to manage complex organizational dynamics while delivering on ambitious technical roadmaps.

## Senior Machine Learning Engineer and Tech Lead

COGNITE (Oslo, Norway)

08/2021 - 02/2023

Technical leadership role building production ML systems for building an industrial knowledge graph. Combined hands-on development with cross-functional team leadership.

- Leading a Led** cross-functional team of 5 software/ML engineers implementing intelligent algorithms
- Implementing intelligent algorithms to find context in otherwise unstructured industrial data:** Architected and maintained microservices deploying ML algorithms in SaaS environment. Included a diagram parsing service, a named entity recognition service, and a service for annotation storage
- Scaling and maintaining microservices to deploy those algorithms in an SaaS setting**
- Creating Created** data infrastructure capabilities to build up an industrial knowledge graph enabling advanced graph queries and industrial reality interactions

## AI Lead Developer

APTIV (Wuppertal, Germany)

12/2020 - 07/2021

Technical innovation leadership in automotive AI applications. Combined deep ML expertise with practical deployment experience.

- Planning and execution of Machine Learning and Data Infrastructure projects in the automotive industry:** Led breakthrough work applying vision-based perception algorithms to automotive radar, using LiDAR as reference sensor. Implemented the training dataset creation process, deploying a pointcloud autolabeling algorithm, and creating a robust data preprocessing and augmentation mechanism
- Design of AI solutions:** Led planning and execution of ML and data infrastructure projects for automotive perception tasks. Guiding the software and hardware integration into the test vehicle
- Participated in a lot of innovation, leading to 7** Contributed to significant innovation pipeline, resulting in 10 patents and 1 publication (see publication list) covering training of radar perception algorithms, automotive data storage, and fleet management systems

## Software Development Expert

APTIV (Wuppertal, Germany)

07/2017 - 12/2020

Built comprehensive data infrastructure and ML pipeline foundation for automotive sensor data, enabling advanced AI research and development capabilities.

- Leading development of a Data Platform Engineering:** Built end-to-end data platform for storage and retrieval of automotive sensor data as a product owner, including recording tools for vehicle sensors, storage infrastructure, labeling systems, and preprocessing workflows
- Development of infrastructure solutions for artificial intelligence in automotive applications:** Microservices for ML Inference: Established microservice architecture for automated inference processing, enriching incoming data with algorithm-generated insights as new sensor data is uploaded
- Established a microservice architecture to automate AI workflows**
- Supervision of a Master Thesis on using Technical Mentorship:** Supervised Master's thesis on GANs for automotive data style transfer

## EDUCATION

### Ph.D., Theoretical Soft Matter Physics

University of Düsseldorf

2013 - 2017

**Strong Theoretical Foundation:** Deep understanding of statistical systems, numerical optimization, and mathematical modeling. Research background provides analytical rigor and quantitative problem-solving skills that transfer effectively to AI/ML leadership roles.

- Topic Dissertation:** Mesoscale modeling of magnetic elastomers and gels — theory and simulations
- Solving magneto-elastic coupling models using numerical simulations, the finite element method, using finite element methods and density functional theory**
- Resulted in 7 publications in recognized** peer-reviewed journals/publications (see publication list) demonstrating research depth and scientific communication skills

### M.Sc. Physics (GPA: 1.1/4.0<sup>1</sup>)

University of Düsseldorf

2012 - 2013

**Gpa: 1.1** (grades at German university range from 1.0 (best) to 4.0 (worst)). Minor: Mathematics Focus on Focus: Soft Matter, Plasma Physics, Solid State and Nanophysics Master thesis: Statistical Physics. Minor: Mathematics. Master thesis on "Emergent states in active systems" was published as a journal article published in peer-reviewed journal, demonstrating early research impact and theoretical depth. B.Sc. Physics (GPA: 1.2/4.0<sup>1</sup>)

University of Düsseldorf

2008 - 2012

Gpa: 1.2 (grades at german university range from 1.0 (best) to 4.0 (worst)). Minor: MathematicsBachelor thesis - "Orientational fields in Plastic Crystals" was published as a journal article. Strong foundation in mathematical modeling and computational physics. Bachelor thesis published as journal article, showing consistent research excellence from early career.

🧪 SKILLS

🏆 ACHIEVEMENTS, HONOURS, AND AWARDS

⚙️ PROJECTS I CONTRIBUTED TO AS MANAGER OR INDIVIDUAL CONTRIBUTOR

Research Internship (DAAD RISE Scholarship)

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COGNITE, — Oslo, NorwayYale University, USA

02/2025-2010 - 04/20252010

Collaborated with a colleague to finetune large language models for enhanced natural language querying (NLQ) performance on Cognite's industrial knowledge graph. Created curated datasets of NLQ problems with ground truth answers to improve model accuracy for industrial data contexts.

Developed specialized training datasets for industrial domain NLQ tasks

Implemented model finetuning pipelines and evaluation frameworks

Achieved measurable improvements in query accuracy and relevance for industrial use cases

Work was highlighted by CEO Girish Rishi in a LinkedIn post showcasing Atlas AI capabilities. COGNITE, Oslo, Norway02/2025–04/2025Led comprehensive benchmarking initiative to evaluate state-of-the-art LLM models on Cognite Atlas AI capabilities, focusing on natural language querying (NLQ) and Document Question Answering (DQA) for industrial knowledge graphs.

**Evaluation Infrastructure:** Designed and implemented scalable benchmarking systems with hundreds of curated test cases

**Multi-vendor Analysis:** Evaluated models from Anthropic, OpenAI, Google, DeepSeek, and Mistral across instruction-tuned and reasoning variants

**Strategic Impact:** Analysis directly informed LLM selection decisions for Atlas AI agent architecture

Delivered external benchmark report providing industry insights on LLM performance for industrial AI applicationsSelected for DAAD RISE Worldwide scholarship for research internship at Yale University. Conducted laboratory experiments on optical properties of butterfly wings and developed theoretical models for optical behavior, demonstrating early research capabilities and international experience. COGNITE, Oslo, Norway03/2025–06/2025Spearheaded organization-wide adoption of AI-powered development tools to enhance engineering productivity. Led comprehensive evaluation, procurement, and implementation strategy for cutting-edge AI coding assistants and development platforms.

**Tool Evaluation:** Assessed Cursor, Windsurf, Bolt, Claude Code, Gemini Code Assist, and Model Context Protocol (MCP) servers for enterprise readiness

**Procurement Leadership:** Managed end-to-end procurement process including legal compliance, security risk assessment, and vendor negotiations

**Cross-functional Collaboration:** Coordinated with Legal, Security, Architecture, and Procurement teams to ensure regulatory compliance and risk mitigation

**Change Management:** Conducted training sessions and rollout strategies to maximize adoption and effectiveness across engineering teams- <sup>1</sup>German grading system: 1.0 (best) to 4.0 (worst)

Recognized by CEO Girish Rishi in a LinkedIn post highlighting contributions to engineering innovation. COGNITE, Oslo, Norway06/2024–12/2024Led strategic hiring initiative for Cognite's new engineering center in Bengaluru, India. Developed comprehensive staffing strategy and execution plan for establishing a center of excellence focused on AI and industrial data platforms.

🧪 TECHNICAL SKILLS & LANGUAGES

Core Programming	Python (Expert, 10+ yrs)	C++ (Expert, 10+ yrs)	Rust (Advanced, 2 yrs)
	TypeScript (Advanced, 2 yrs)		
AI/ML Specialization	PyTorch (2+ yrs)	TensorFlow (2+ yrs)	LangChain
	Vector Databases	Support Vector Machines	RAG
	Model Evaluation	Gradient Boosting	
	Model Context Protocol (MCP)		
Mathematical Foundation	Statistical Analysis	Numerical Simulations	Mathematical Modeling
	NumPy/SciPy (Expert)	Scikit-learn (2+ yrs)	

## Engineering Leadership

Technical Team Leadership

Strategic Hiring & Talent Acquisition

Enterprise AI Strategy & Implementation

AI Productivity Tooling Adoption

Cross-functional Collaboration

Operational Excellence

Production ML Systems

## Infrastructure & Tools

Docker

Kubernetes

PostgreSQL

MongoDB

Azure

GCP

FastAPI

Microservices

Linux

Cursor

Claude Code

Gemini Code Assist

## Languages

German (native)

English (C1)

Norwegian (B2)

French (A2)

**Strategic Planning:** Designed staffing plan and organizational structure for new engineering center from ground up

**Hiring Process Development:** Created job descriptions, interview processes, technical assessments, and take-home assignments for 20+ engineering roles

**Execution Leadership:** Distributed hiring pipelines across management team and maintained regular progress tracking against hiring goals

**Cross-team Coordination:** Collaborated with local and international teams to ensure seamless integration and knowledge transfer

Contributed to successful inauguration of India Center of Excellence supporting Cognite's global expansion strategy.

## TEACHING & KNOWLEDGE SHARING

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COGNITE, Oslo,  
Norway04/2023—  
08/2023

Vector—similarity  
lookup—service  
build-on-top-of-the  
Weaviate—vector  
database-

Enables—to  
retrieve—relevant  
context—for-LLM  
queries—to-enable  
an—industrial  
chatbot—and  
code—completion  
experienceCOGNITE,  
Oslo,  
Norway06/2022—  
08/2022

Creating-a-backend  
to—store—symbols  
and—process—lines  
extracted—from  
engineering  
diagrams—in  
an—industrial  
knowledge-graph-

Implemented  
in—Python—and  
Typescript—and  
interfaces—to  
COGNITE's-internal  
flexible—data  
modeling-service-

Allows—for  
advanced—graph  
queries—on—the  
knowledge—graph  
and,thereby,  
enables-advanced  
interactions  
with—the  
industrial—reality  
COGNITE, Oslo,  
Norway08/2021—  
06/2022

Implemented—a  
REST-API-to-store  
label—information  
on—files—within  
COGNITE's—data  
warehouse-

Went-from-design  
to-fully-productive  
usage-with-SLAs-in  
less-than-a-year-

~~11/2020—12/2020~~

~~Deployed a 3d bounding box detection network on Nvidia Jetson Xavier hardware-~~

~~Optimizations and tweaks to make an automotive detection network fast enough to run live in the test vehicle APTIV, Wuppertal, Germany06/2020—10/2020~~

~~Runtime environment written in Rust for live execution of AI algorithms in test vehicles for demo purposes-~~

~~Main contributions: Preprocessing from the raw sensor data into the TensorFlow network input, subsequent postprocessing of the network results into bounding boxes for visualization, as well as abstractions to allow for different combinations of sensors and networks APTIV, Wuppertal, Germany02/2020~~

~~- 0304/20202021~~

~~Python / Rust tooling to download sensor data and ground truth from a data warehouse and refine it for neural network training-~~

~~Sophisticated interpolation algorithm for 3d bounding boxes to arbitrary timestamps-~~

~~Using HDF5 as final data exchange format~~ Designed and delivered 3 comprehensive lectures with exercises: Numerical Optimization (SOTA ML optimizers like Adam & Evolutionary Algorithms), Gradient Boosting, and Support Vector Machines. Demonstrates ability to



08/2022 - 10/2022

~~Organizing and conducting a~~ Led technical organization of Data Science hackathon ~~in Trondheim with Cognite and researchers from NTNU~~

~~Finding a suitable dataset, defining a task, supervising the students during the event, and evaluating the contributions, including dataset curation, task definition, student supervision, and contribution evaluation.~~

~~University of Wuppertal, Germany 10/2020–04/2021~~

~~Lecture "Artificial Intelligence Based Sensor Signal Processing for Autonomous Driving" held in collaboration with colleagues from APTIV~~

~~Prepared and held lectures and exercises about Numerical Optimization in Data Science, Support Vector Machines, and Gradient Boosting~~ APTIV, Wuppertal, Germany ~~03/2019–09/2019~~

~~Supervised a master student on using GANs for automotive data style transfer~~

~~Created artificial LiDAR data by modding the video game GTA: V, then trained a GAN on real LiDAR data to do the domain transform~~

~~Tested and benchmarked this approach with a birds-eye-view 2D object detection model~~ University of Düsseldorf, Germany ~~2016~~

~~Supervised a bachelor student on the numerical simulation of magnetic gels~~ University of Düsseldorf, Germany ~~2013–2017~~

~~Lectures: Quantum Mechanics and Statistical Mechanics~~

~~Created homeworks and gave exercise classes~~

~~Answered student questions about the lecture topics~~

~~Designed and held oral and written exams~~ ⚙️ TARGET ROLES & KEYWORDS

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Seeking: Staff Engineer, Principal Engineer, Technical Lead, AI Architect, Technical Director roles at technology companies with strong engineering culture. Open to hybrid remote positions in Norway or full remote opportunities.

## 🎵 ABOUT ME

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Specializations: AI Strategy, Machine Learning Architecture, Technical Leadership, Engineering Excellence, Enterprise AI Transformation, Industrial AI Applications, Team Scaling, Production ML Systems.