# Dr. Peet Cremer

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**AI Technical Leader with deep expertise in machine learning theory and enterprise AI strategy. Combines Statistical Physics foundation with proven experience scaling engineering teams (up to 18 developers) and architecting production AI systems. Currently driving enterprise adoption of cutting-edge AI development tools across 100+ engineers while maintaining hands-on technical expertise. Seeking technical leadership roles to guide organizations through AI transformation.**

## 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
- Scaled engineering organization from 5 to 18 developers with only 2 customer-impacting incidents over 2 years
- Architected production ML systems for industrial knowledge graphs serving enterprise-scale data platforms
- 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

**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 Strategy**: Architected organization-wide adoption of cutting-edge AI development tools (Cursor, Bolt, Claude Code, Gemini Code Assist, and Model Context Protocol 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 Cognite'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 Collaboration**: Coordinated with Legal, Security, and Procurement teams to ensure compliance, risk mitigation, and successful tool rollouts. Managed end-to-end procurement processes and conducted training sessions to maximize adoption effectiveness

Recognized by CEO Girish Rishi in LinkedIn posts for AI tooling strategy leadership and Atlas AI engineering innovation.

### Senior Director of Engineering — COGNITE (Oslo, Norway) — 02/2024 - 2/2025

Strategic engineering leadership role combining organizational growth with AI initiative development. Gained executive perspective on enterprise AI transformation while maintaining technical involvement.

- **Strategic Expansion**: Designed and executed hiring strategy for Cognite's India Center of Excellence, establishing staffing plans and engineering operations for 20+ roles. Contributed to successful inauguration of India Center of Excellence supporting Cognite's global expansion strategy
- **Engineering Leadership**: Managed 10-15 developers across data integration, connectivity, and AI initiatives during critical company scaling phase
- **Product Strategy**: Collaborated on Contextualization services roadmap, aligning technical architecture with business objectives
- **Technical Architecture**: Provided strategic guidance on data platforms, ML systems, and engineering workflows

### Director of Engineering — COGNITE (Oslo, Norway) — 02/2023 - 02/2024

Engineering management role focused on operational excellence and team scaling. Successfully managed rapid growth while maintaining service reliability and team satisfaction.

- **Operational Excellence**: Maintained only 2 customer-impacting incidents across Diagram Parsing, Annotations, and Entity Matching services over 2 years
- **Team Health Leadership**: Transformed 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
- **Rapid Scaling**: Successfully grew from 1 team (5 developers) to 3 teams (18 developers) while maintaining delivery commitments
- **Technical Focus**: Led teams specializing in contextualization of industrial data, data-driven troubleshooting applications, and parsing of engineering diagrams

### Senior Machine Learning Engineer and Tech Lead — COGNITE (Oslo, Norway) — 08/2021 - 02/2023

Technical leadership role building production ML systems for industrial data contextualization. Combined hands-on development with cross-functional team leadership.

- Led cross-functional team of 5 software/ML engineers implementing intelligent algorithms for industrial knowledge graph construction
- Architected and maintained microservices deploying ML algorithms in SaaS environment, including vector similarity services and annotation APIs
- Created data infrastructure capabilities 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.

- Led planning and execution of ML and data infrastructure projects for automotive perception tasks
- Designed AI solutions for automotive applications, guiding software and hardware integration into test vehicles
- 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

**Technical Innovation**: Pioneered application of computer vision algorithms to automotive radar data, creating complete ML pipeline from data collection to production deployment.

- **Novel AI Application**: Led breakthrough work applying vision-based perception algorithms to automotive radar, using LiDAR as reference sensor, implementing both human labelers and pointcloud autolabeling algorithms, and creating robust data augmentation pipelines for high-quality training datasets
- **Data Platform Leadership**: Built comprehensive data platform for automotive sensor data storage and retrieval, including sophisticated recording tools and labeling pipelines
- **ML Infrastructure**: Established microservice architecture automating AI workflows, from data augmentation to model training and deployment
- **Technical Mentorship**: Supervised Master's thesis on GANs for automotive data style transfer, demonstrating knowledge transfer capabilities

## 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.

- Dissertation: Mesoscale modeling of magnetic elastomers and gels using finite element methods and density functional theory
- 7 peer-reviewed publications (see publication list) demonstrating research depth and scientific communication skills
- Expertise in numerical simulations and mathematical modeling that strengthens technical leadership capabilities

### M.Sc. Physics (GPA: 1.1/4.0[1]) — University of Düsseldorf — 2012 - 2013

Focus: Soft Matter, Statistical Physics. Minor: Mathematics. Master thesis on "Emergent states in active systems" published in peer-reviewed journal, demonstrating early research impact and theoretical depth.

### B.Sc. Physics (GPA: 1.2/4.0[1]) — University of Düsseldorf — 2008 - 2012

Minor: Mathematics. Strong foundation in mathematical modeling and computational physics. Bachelor thesis published as journal article, showing consistent research excellence from early career.

### Research Internship (DAAD RISE Scholarship) — Yale University, USA — 07/2010 - 10/2010

Selected 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.

[1] *German grading system: 1.0 (best) to 4.0 (worst)*

## TECHNICAL EXPERTISE

**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 · RAG · Vector Databases · Support Vector Machines · Gradient Boosting · Model Evaluation · AI Productivity Tooling · Model Context Protocol (MCP)

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| 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 · Cross-functional Collaboration · System Architecture · 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) |

## TEACHING & KNOWLEDGE SHARING

**Lecturer on Artificial Intelligence** — University of Wuppertal, Germany — 10/2020 - 04/2021

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 distill complex ML theory into teachable concepts.

**Co-Organizer, NorwAI 2022 Hackathon** — NTNU Trondheim, Norway — 08/2022 - 10/2022

Led technical organization of Data Science hackathon, including dataset curation, task definition, student supervision, and contribution evaluation.

## TARGET ROLES & KEYWORDS

**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.

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