**AKSHAY PARANJAPE**

**Location**: Keplerstr. 18, 91056 Erlangen, Germany  
**Phone**: +49 1639079165  
**Email**: contact@akshayparanjape.com  
**LinkedIn**: [linkedin.com/in/akshayparanjape2](https://www.linkedin.com/in/akshayparanjape2)

**SUMMARY / PROFILE**

Ph.D. candidate at RWTH Aachen, bridging academic research with industry-oriented AI solutions. A Lead AI Engineer with 7+ years in AI-driven software for manufacturing—specializing in advanced ML algorithms, Generative AI, cloud-native solutions, and architecture. Skilled at communicating complex AI strategies to C-level stakeholders. Looking forward to build industrial contacts.

**PROFESSIONAL EXPERIENCE**

**IconPro GmbH, Aachen**

**Head of AI Project** (Sept 2023 – April 2025)

* Serve as lead contact for key clients, guiding AI requirements, integration, and resource allocation.
* Oversee research and commercial AI projects, ensuring timely completion and risk mitigation.
* Present complex AI concepts to executives, securing funding and advancing product innovations.
* Support development at IconPro as Senior ML Engineer

**Team Lead | Machine Learning Engineer** (Sep 2021 – Aug 2023)

* Managed an 11‑member cross-functional team to deliver predictive quality and process optimization solutions.
* Directed technical strategy for four major customers, ensuring scalable software integration.
* Designed and deployed **ARES**, a large-scale AI system on cloud infrastructure (Azure/AWS).
* Supervised four master’s thesis students, bridging academic research and commercial goals.

**Machine Learning Engineer** (Sep 2019 – Aug 2021)

* Created an AutoML prototype in Python, scaled via Kubernetes microservices for production use.
* Implemented RL solutions to optimize production parameters, significantly reducing scrap rates.
* Deployed software in the cloud with REST APIs and OpenAPI specs for robust integration.
* Collaborated with cross-company Agile teams to deliver on research project milestones.

**Notable Research Projects**

* **SSQC, SySpot**: Image segmentation-based quality inspection.
* **IRLEQUM, KI-Erosion, DiMAD**: Build various AI frameworks for manufacturing use-cases.
* **Cloud56 (Industrial IoT)**: AI-based predictive maintenance on a 5G network using CloudRAN.

**Carl Zeiss AG, Oberkochen, Germany (Sep 2018 – Jun 2019)**

* **Master’s Thesis & Internship**: Developed an Open Set Classification approach with Deep Learning (Zeiss IP), improving accuracy 6–8% via Extreme Value Theory.

**Research Assistant, RWTH Aachen (Apr 2017 – Apr 2018)**

* Contributed to language model research with Prof. Herman Ney, focusing on error bounds.
* Extracted large-scale statistical features for Bayer AG, identifying key process insights.

**Research Intern, Institute Fresnel, Marseille, France (May 2015 – July 2015)**

* Conducted spectral studies employing statistical and probabilistic techniques as part of computational optics research.

**EDUCATION**

**Ph.D. in AI for Manufacturing** (in progress, Sep 2019 – Apr 2025)  
RWTH Aachen University, Germany (Chair of IQS)

* Research in Reinforcement Learning for quality-oriented manufacturing.
* Collaboration with IconPro for practical industrial applications.

**M.Sc. in Simulation Sciences** (Oct 2016 – Jun 2019)  
RWTH Aachen University, Germany

* Focus: Data Science, ML, Computer Vision, Speech Recognition, Parallel Programming.
* Thesis: “Open Set Classification using Deep Learning” (recognized as Zeiss IP).

**B.Tech. in Engineering Physics** (Jul 2012 – May 2016)  
IIT Delhi, India

* Ranked among top 3 engineering institutes in India.
* Core coursework: Linear Algebra, Data Structures, Statistics.

**TECHNICAL SKILLS**

* **ML/AI**: Supervised/Unsupervised, RL, AutoML, CNNs, GANs, RNN/LSTM, Transformers
* **MLOps**: MLflow, Docker, Kubernetes, Microservices
* **Programming**: Python, C++, MATLAB
* **Frameworks**: TensorFlow, PyTorch, XGBoost, Scikit-learn, Flask
* **Cloud**: Azure (DevOps, ML Services), AWS (EC2, EKS)
* **Databases**: SQL, PySpark
* **Other**: SHAP-based model interpretability, System Design, Agile/Scrum