Aditya Ghanashyam Ladawa

Braunschweig, Germany | +49 15510 030840

adityaladawa12@gmail.com | GitHub | LinkedIn

23. July 2025

Mercedes-Benz Tech Innovation

Application for AI Security Intern/Working Student Position

The intersection of AI security and systematic quality assurance presents architectural challenges that demand both technical precision and operational foresight. Your framework development initiative aligns with my experience building secure, scalable agentic systems where reliability and security are foundational requirements, not afterthoughts.

- Built production-grade agentic systems using LangGraph and LangChain with explicit state control, memory orchestration, and persistent execution patterns. These architectures prioritize deterministic workflows and eliminate runtime dependencies that introduce security vulnerabilities in AI pipelines.

- Developed automated content generation systems processing 500K+ views with cost optimization to <$0.15 per unit while maintaining quality controls. This experience translates directly to building AI security frameworks that balance computational efficiency with robust validation mechanisms.

- Architected multi-agent coordination systems achieving ~94% accuracy in biomedical literature extraction through hierarchical agent teams with supervisor oversight. The security principles applied—agent isolation, controlled communication channels, and fail-safe mechanisms—mirror requirements for enterprise AI security frameworks.

- Engineered real-time computer vision systems with <100ms latency on edge devices, implementing secure data pipelines for medical scan processing. Experience includes CycleGAN harmonization and super-resolution enhancement while maintaining data integrity and processing security.

The opportunity to expand AI security use cases within Mercedes-Benz Tech Innovation's innovation framework represents exactly the kind of systematic, scalable challenge that drives my engineering approach. My technical foundation in secure system architecture, combined with hands-on experience in AI pipeline security, positions me to contribute immediately to your AI security and quality framework development.

Warm regards,

Aditya Ghanashyam Ladawa