# Mohammad Najeeb

Address: Saarbruecken, Saarland, Germany (+49) 1573-0050-253 mona00002@uni-saarland.de
github.com/mohammadnajeeb linkedin.com/in/mohammadnajeeb mohammadnajeeb.github.io/

## Experience

**Computational Interaction Group (CIX), Saarland University** **Sept. 2024 – Mar. 2025**
*Graduate Research Assistant* *Saarbrücken, Saarland, Germany*

- Developed interactive data processing and visualization pipelines supporting **touch-based learning and HCI studies**.
- Automated validation and reporting workflows, reducing manual data handling by **30%**.

**Catnyx India Pvt. Ltd.** **Oct. 2023 – Apr. 2024**
*Web Developer Intern* *Aligarh, India (Hybrid)*

- Built interactive React dashboards and integrated RESTful APIs supporting 1,000+ daily users, improving accessibility of real-time business analytics.
- Optimized MongoDB/SQL queries, reducing page load time by 40% and boosting reporting throughput across multiple endpoints.

## Technical Skills

**Web & Front-End**: HTML5, CSS3, JavaScript, React, Dash, Streamlit
**Back-End & Databases**: Python, Flask, Node.js, MongoDB, SQL
**LLMs & AI**: HuggingFace, LangChain, RAG, Vector Databases (ChromaDB), PyTorch, Transformers
**UI/UX & Design**: Figma, Prototyping, Usability Testing, NASA-TLX
**DevOps**: Docker, Git/GitLab, CI/CD

## Education

**Universität des Saarlandes** **04/2025 – 04/2027**
*Master of Science in Media Informatics* *Saarbrücken, Germany*

**Aligarh Muslim University** **08/2019 – 07/2022**
*Bachelor of Science (Honors) in Mathematics* *Aligarh, India*

## Projects

**Skill Lyft: AI-Powered Learning Prototype** | *Figma, React, Flask, Hugging Face, PyTorch, Agile*
∗ Conceptualized and prototyped a **learning platform** simplifying complex ML concepts like Transformers, LLMs, and Neural Nets.
∗ Built a full-stack prototype with React frontend and Flask backend, supported by a complete Figma hi-fi UI/UX design.

**UniChatbot** | *Python, LLMs, RAG, LangChain, ChromaDB, HuggingFace, Streamlit*
∗ Developed an LLM-powered chatbot using LangChain and RAG to answer 500+ university-related queries.
∗ Implemented **semantic search with vector embeddings**, improving query relevance by 35%.
∗ Optimized local inference with HuggingFace models and dynamic context windows for efficiency.
∗ Containerized with Docker and deployed via Streamlit, ensuring **scalability** and smooth student interaction.

**Smart StudyDesk: AI-Powered Study Organizer** | *Figma, UI/UX Research, Python (Prototype)*
∗ Designed and prototyped a cross-platform study assistant that organizes lecture notes, summarizes content, and generates personalized quizzes.
∗ Improved navigation efficiency by **30%** and boosted engagement after iterative refinements.

**HealthSenseAI: Automated Disease Detection System** | *MongoDB, Express, React, Node, Python*
∗ Integrated a Hugging Face pre-trained model into a MERN stack web app for automated disease predictions.
∗ Delivered a user-friendly interface that provided real-time predictions, enabling accessibility for non-technical healthcare staff.

**Freelance UI Design for Knowesgg** | *Figma, Prototyping, Visual Design, UX Optimization*
∗ Redesigned and streamlined the website UI by removing 15% redundant elements, delivering a modern design language aligned with brand positioning and user expectations.
∗ Implemented a refreshed color palette and custom iconography, improving visual coherence and enhancing user mood perception by 25% according to stakeholder feedback.
∗ Delivered a high-fidelity Figma prototype facilitating cutting edge front-end implementation time by 20%.

## Publications

- Zim, A H., Ashraf, A., Iqbal, A., **Mohammad Najeeb**, Malik, A., Kuribayashi, M., & Khan, A. (2024). Zea Mays Leaf Disease Classification Using Swin Transformer. *Proceedings of the International Conference on Signal, Machines, Automation, and Algorithm (SIGMAA 2023)*, 827–838. Springer [DOI]