

Curriculum Vitae

Personal Details

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Skills and Interests

AI & Data Science: Generative AI, Agentic AI, PyTorch, TensorFlow, Computer Vision
Software Engineering: Python, C++, Fast API/Flask, HTML, CSS, Web Scraping, Git, Docker, MLOps
Product & System: Product Development, DIY, 3D Design (CAD) & Printing, System Design, UI/UX
Languages: Fluent in English and Hindi

Work Experience

- August 2022 – Present** **Research Assistant – Max Planck Institute for Human Development, Berlin, Germany**
- Worked in the group “Center for Humans and Machines” led by Prof. Iyad Rahwan.
 - Architected end-to-end pipeline for large-scale TikTok audit and algorithmic bias research.
 - Engineered software and AI workflows across 14+ projects.
 - Employed and fine-tuned LLMs (GPT, Claude, DeepSeek, Gemini) for research tasks.
 - Automated complex data gathering, model training and technical orchestration for cross-functional research teams.
- November 2021 – March 2022** **Deep Learning Intern – SynergyLabs Technology, Gurugram, India**
- Orchestrated projects such as Automatic Traffic Counter and Classification, Video Incident Detection Systems, Automatic Number Plate Detection System.
 - Trained lightweight models that can be run on edge devices like Raspberry Pi and Jetson Nano.
 - Worked with Nvidia Deepstream and deployed Deep Learning models on Jetson Xavier NX and deployed them on Indian National Highways.
- June 2021 – August 2021** **Data Science Intern – iNeuron.ai, Bengaluru, India**
- Worked on a Home Security Automation Project.
 - With the help of Computer Vision, we were able to detect motion, face and weapon from a CCTV footage around the house.
- October 2020 – March 2021** **Data Analyst Intern – Sabertooth Technologies, Nagpur, India**
- Worked on a web scraping project with a Belgium-based client.
 - Created Spiders for scraping valuable information from various European renting websites.
 - Scraped, cleaned data, and delivered the spiders to the client.
 - Worked on a marketplace project for Sabertooth Technologies.
 - It will help users to compare products from various e-commerce websites on a single platform.

Education

- March 2026** **Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany**
Master of Science, Artificial Intelligence, GPA – 1.9
- August 2021** **Guru Gobind Singh Indraprastha University, Delhi, India**
Bachelor of Technology, Information Technology, CGPA – 8.32/10

Publications

- February 2026** **Dynamics of Content Amplification on TikTok**
EPJ Data Science, Springer Nature
- June 2021** **AI-Based Physical Activity Tracker**
International Journal of All Research Education and Scientific Methods

Achievements and Personal Projects

- October 2025 – March 2026** **AI Systems Project – KWARC, FAU**
- Implementing Symbolic AI techniques on real world scenarios.
 - Worked with concepts such as Search, Adversarial Search, Planning, Semantic Web Data.
- November 2025** **RFID - QR Authentication System, Siemens Healthineers Hackathon**
- Offline two-factor Authentication System using existing Siemens Healthineers RFID cards, QR code and an app. The solution can be attached to any medical device like CT, MRI etc.
 - Developed and presented a working prototype in two days at the Hackathon.
- January 2025 - September 2025** **Neuro-SAM, Foundation Model for Dendrite and Dendritic Spine Segmentation**
- A python package that lets you trace and segment individual dendrites in a 3D stack.
 - It also allows you to perform a novel tubular view analysis of the dendrites and segment the dendritic spines.
- January 2024 & January 2025** **2x Winner – Hackoverflow, iba AG and BEST Erlangen**
- Secured 1st place in a hackathon organized by BEST Erlangen and iba AG.
 - In 2024, our team build a web-based solution for the kitchen team at iba AG.
 - In 2025, we administrated anomaly detection for Time Series Sensor Data.
- May 2024 – August 2024** **AI Factory Automation and Processing Systems Project, FAPS Lab, FAU**
- Worked on Deep Multi-View and Multi-Modal Learning for Quality Monitoring System in Industrial Manufacturing.
 - Quality control classification of electric motor based on Image and Time Series data in one single model.
- April 2024 – August 2024** **Biomedical Image Analysis Project, Anki Lab, AIBE, FAU**
- Explored and benchmarked SOTA foundation models to implement dendrite segmentation.
 - Investigated models such as SAM, Fast-SAM, SAM + LoRA on light microscopy data.
- May 2023 - July 2023** **Winner - Tracking Olympiad, Department of AI in Biomedical Engineering, FAU**
- Secured 1st place in a coding competition at the university.
 - The aim of the competition was to develop an algorithm that can accurately track Hexbugs in a closed environment.
- May 2021 – June 2021** **Gymmify.ai – An AI Powered Virtual Gym**
- A Deep Learning based Pose Correction Tool that helps in workouts.
 - Using Google Mediapipe and custom algorithms, it was able to correct various exercises easily
- September 2020** **Kaggle 2x Expert - Kaggle**
- Was an active member of the Kaggle developer community.
 - Serving for the community and growing each day in the field of data science

Coursework and Certifications

- July 2020 – April 2021** **Deep Learning (Computer Vision and Natural Language Processing) – iNeuron.ai, India**
Learnt about the concepts of Deep Learning, Computer Vision and NLP along with deployment.
- December 2019 – April 2020** **Machine Learning – Coding Blocks, Delhi, India**
Learnt about various machine learning algorithms and hands on experience on multiple datasets.