Dhruv Sharma (M.Sc. Data Science)

Address : Rosental 16, 2. OG, 90403, Nürnberg, Germany

Email: dhruvs1998@gmail.com **Phone:** (+49) 17627481619

Website: https://github.com/DhruvSharma98 **LinkedIn:** https://www.linkedin.com/in/dhruvs98/

Date of birth: 12/12/1998

ABOUT ME

Results-driven and detail-oriented developer with a strong passion for artificial intelligence and data analytics. Have been involved in the field of computer science since high school, achieved a bachelor's degree in the same stream and now completed my master's in data science. Actively learning German to expand cross-cultural competence.

WORK EXPERIENCE

[01/2025 – 05/2025]

Master's Thesis - Mercedes Benz Mobility AG, Stuttgart, Germany

Effects of Statistical Assumptions on Random Forest Regression

- Combined statistical assumptions and machine learning techniques for handling input data distributions to improve model scores across all vehicle classes
- Cut costs by removing inefficiencies and defining a precise prediction strategy
- Simulated data, built experimentation pipelines, and documented insights

Skills - Python, Machine Learning, Git, Data Analysis, Unit Testing

Reference - https://github.com/DhruvSharma98/docs/blob/main/Thesis_Zeug.pdf

[07/2024 – 11/2024]

Intern - Mercedes Benz Mobility AG, Stuttgart, Germany

Artificial Intelligence and Software Engineering

- Reduced training time by 56% and cloud costs by integrating Dask in Databricks
- Engineered client-aligned models via robust data handling and transformations
- Delivered valuations, analyzed logs, and added MLflow to manage ML ops
- Tuned models with Optuna, standardized processes, and added tests for reliability

Skills - Azure Databricks, ETL, PySpark/Dask, CI/CD, Docker, Github Actions

Reference - https://github.com/DhruvSharma98/docs/blob/main/Intern_Zeug.pdf

PROJECTS

[11/2023 – 02/2024]

Road Scene Understanding

Developed a sidewalk detection system using GPS and semantic segmentation.

- Used Valhalla routing API and GPS signals to determine direction instructions
- Trained DeepLabv3-ResNet50 on Cityscapes (5K images, 50 cities) using PyTorch
- Fine-tuned on Mapillary dataset (1000 images) to improve sidewalk detection
- Combined GPS and image segmentation model to assist navigation

Skills - PyTorch, ResNet, Image Segmentation, Navigation Systems

Link - https://github.com/DhruvSharma98/Project_Road_Scene/blob/main/slides.pdf

[05/2023 – 08/2023] **Age Domain Translation using Diffusion Models**

Generated age-progressed or regressed faces from input image and prompt.

- Initialized pre-trained diffusion model capable of generating photo-realistic images
- Established model training workflow using Hugging Face
- Constructed custom dataset as required by the training pipeline
- Trained the model on a custom dataset via InstructPix2Pix

Skills - GenAI, Stable Diffusion, PyTorch, Hugging Face

Link - https://github.com/DhruvSharma98/docs/blob/main/diffusion.pdf

[12/2020 – 02/2021] **Data Analytics - Quantium**

Completed a Data Analytics Virtual Experience Program

- Processed data for trend analysis and customer segmentation
- Conducted experimentation and uplift testing of marketing strategies
- Explored the commercial use of analytics for business decisions

Skills - SQL, Business Intelligence, Visualization

Project Link - https://github.com/DhruvSharma98/docs/blob/main/Quantium.pdf

EDUCATION

[10/2022 – 07/2025] **MASTER OF SCIENCE (DATA SCIENCE)**

Friedrich-Alexander-Universität Erlangen-Nürnberg   https://www.fau.de/

Address: Schloßplatz 4, 91054 , Erlangen, Germany |

SOFT SKILLS

Qualities

- **Venturesome** - Apply CS skills across diverse domains beyond comfort zone
- **Economical** - Find cost-effective solutions (e.g., OCR-based stock data extractor)
- **Practical** - Favor pragmatic approaches (e.g., word list shuffler for exam prep)

Interests

- **Socializing** - Enjoy outdoor activities and quality time with friends
- **Sports** - Play table tennis and badminton
- **Entertainment** - Travelling, watching movies and multiplayer games