Naga Venkata Sai Jitin Jami

Erlangen, Germany
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EDUCATION

Friedrich-Alexander-Universität Erlangen-Nürnberg **10/2023 – Present**
PhD Computer Science *Erlangen, Germany*

Friedrich-Alexander-Universität Erlangen-Nürnberg **10/2020 – 09/2023**
MSc Computational Engineering *Erlangen, Germany*
Coursework: Pattern Recognition, Pattern Analysis, Machine Learning Time Series, Numerical Methods

Università della Svizzera italiana **09/2021 – 09/2023**
Masters in Computational Science *Lugano, Switzerland*

Coursework: Machine Learning, Deep Learning Lab, High Performance Computing, Graph Deep Learning

Manipal Academy of Higher Education **08/2014 – 05/2018**
B. Tech in Aeronautical Engineering *Manipal, India*

WORK EXPERIENCE

Doctoral Researcher | MaD Lab, FAU **10/2023 – Present**

Computational Science Werkstudent | Siemens Healthineers **03/2023 – 09/2023**

- Contributor to the DigitalTwin of the Heart project to simulate Atrial Fibrilation
- Computational Modelling of Left Atrium for Universal Atrial Coordinates in 2D.
- Successful generation of landmarks and geodesic paths to describe topology on a 2D map applicable to 70% of patients

Research Assistant | MaD Lab, FAU **03/2022 – 03/2023**

- Research assistant on the Deutsche Museum Project, to build an AI software for tracking visitors in a museum.
- Built Computer Vision models for Age detection using multi ethnic facial datasets to increase efficiency to 97% on custom multi-ethnic test datasets.
- Carried out data annotation using CVAT that was further used training Computer Vision model for Multi-camera multi-object tracking.

MaRS Scholarship Researcher (Master Thesis) | USI, Lugano **07/2022 – 02/2023**

- Improved Locational Marginal Price prediction time using Machine Learning and Deep Learning.
- Generated ground truth data with MATPOWER and MOSEK on PGLib-OPF electricity grids.
- Achieved maximum 5% error rate when using popular machine learning models on various *n-1* security criterion cases to predict LMP

Data Science Werkstudent | Streem.ai **05/2021 – 10/2021**

- Researched statistical models for anomaly detection in time series data for manufacturing companies.
- Created benchmarking systems to test performance of baseline OneClass Classifiers using synthetically generated datasets designed to test anomaly detection performance.
- Explored model explainability using SHAP library for deriving feature responsibility.

PROJECTS

- Age Estimation on UTK Dataset
- Mathematical Reasoning With Transformers
- Text Generation with LSTMs
- Time Series Forecasting with Graph Neural Networks
- Quadratic Programming for Investment Portfolio Optimization

TECHNICAL SKILLS

Languages: `Python, C++, MATLAB`
Developer Tools: `PyCharm, VS Code, Docker`
Technologies/Frameworks: `Linux, Git, Jupyter Lab`
ML Libraries: `NumPy, SciPy, Pandas, scikit-learn, PyTorch, Docker, CVAT, RayTune`

AWARDS

- Masters Research Scholarship
- ERASMUS Exchange Scholarship

LANGUAGES

- English - C1
- German - A2

REFERENCES

- **Prof. Olaf Schenk** - Master Thesis supervisor, olaf.schenk@usi.ch
- **Dr. Juraj Kardos** - Master Thesis co-supervisor, juraj.kardos@usi.ch