

Binay Kumar Pradhan



Phone: +49-1638504970
Date of Birth: 28 July 1996
Nationality: Indian
Residence: Cottbus, Germany
Email Id: pradhan.binay.de@gmail.com
LinkedIn: www.linkedin.com/in/i-binay
GitHub: <https://github.com/VinayIN>
Portfolio: <https://wezn.github.io/>

PROFESSIONAL EXPERIENCES

AI Data Engineer - II (June 2022 – September 2022)

Wolkus Technology Solutions Pvt Ltd - Bangalore, Karnataka

- Created ml training pipeline using Sagemaker's Pipeline and Migrated datamart from GCP to AWS
- Optimized lambda functions for production/QA environments with serverless framework
- Created a logger package to be used by the team and open-sourced it in PYPI server (<https://pypi.org/project/fasal-logger/>)

Software Engineer - II (October 2021 – March 2022)

Myelin Foundry Pvt Ltd - Bangalore, Karnataka

- Created features for in-car AI digital assistance like recognizing facial emotions, hand gestures performed inside the car and object detection using Mediapipe framework (Python/Android) and deployed it on edge device in form of an Android App.

Data Science Engineer (July 2019 – October 2021)

Utopia India Pvt Ltd - Bangalore, Karnataka

- 4C (Data-Cleaning package) – Text Cleaning and Structuring Package: Responsible for creating data apps for the clients to use the data-cleansing tool on their custom dataset, creating API modules for the 4C package, Identifying bottlenecks in the code architecture, integrating additional ml solutions to the data app on-demand, creating visualization to demonstrate capabilities of the tools to clients and providing quarterly KT to the team
- Text Parsing and Information Extraction Tool: Conceptualized reinforcement learning on text labeller that implemented feedback received from the team in real-time and demonstrated a proof-of-concept on the use case of Transformers with BERT and GPT language models for text generation of industrial equipment
- Developed a regex-based parser on top of ML parser along with a consensus algorithm to accurately extract information from text
- Developed an embedding based entity mapping tool with spell correction and similar keyword extraction with 85% filling accuracy and 15x better performing than excel macros and rule-based tools
- Designed image matching algorithm using templates to segment text in the pdf and Integrated business rules for them
- Assessed using Jenkins as a CI/CD tool for the team and set up the testing pipelines for the data-cleansing tool
- Assisted in the configuration of AWS SPOT instances for multiple projects, load distribution on the development server and created scripts to automate data migration for maintaining it as Master Data
- Conducted a 5-weeks training session for cross-platform teams with a hands-on workshop on python along with a few data analysis libraries and ML algorithms

Machine Learning Intern (January 2019 – July 2019)

Utopia India Pvt Ltd - Bangalore, Karnataka

- Developed a text-matching algorithm using a combination of pre-trained vectors with custom embeddings, fuzzy logic and set-relation techniques
- Developed a new data-driven algorithm for standardization and structuring of text labels and values
- Orchestrated the data cleansing tool using Makefile for batch file processing

Research Intern (May 2018 – July 2018)

Institute of Development and Research in Banking Technology - Hyderabad, Telangana

- Prepared the Hindi and Bengali mixed-script dataset for training.
- Assisted a fellow scholar in solving an NLP problem of part-of-speech tagging for mixed-script social media texts and documenting the journal "Improving Code-mixed POS Tagging Using Code-mixed Embeddings"(<https://doi.org/10.1145/3380967>)

ACADEMIC QUALIFICATION

Master of Science in Artificial Intelligence (October 2022 – Present)

Brandenburgische Technische Universität, Cottbus-Senftenberg - Cottbus, Brandenburg, Germany

Bachelor of Technology in Information Technology (August 2015 – June 2019)

International Institute of Information Technology - Bhubaneswar, Odisha, India

CGPA: 7.54/10

EXTRACURRICULAR ACTIVITIES

- **ISAC**, BTU Cottbus-Senftenberg (2023) - Developer of ISAC-website (<https://isac-btu.web.app/>) and working as a core member organising cultural events in university.
- **Techniker Cosmocard**, Cottbuser Weihnachtsmarkt (2022) - Part-time job at Christmas market
- **Mozilla Internet Health Hackathon** (2019) - Developed an analytical security report in 24 hours hackathon challenge capturing the trackers used by android apps
- **Smart India Hackathon**, organised by GOI (2018) - Created a web app in 48 hours hackathon challenge documenting disasters in India and used a predictive ml model to forecast the expected number of resources to be used in future in an interactive dashboard
- **Technova Techno-fest**, organised at IIIT Bhubaneswar (2018) - Showcased a computer vision assisted ledger (use-case for university) for vehicles passing through a checkpoint and monitoring the license plate
- **Dell Codefest** (2017) - Illustrated a Real-time predictive ml model for apparel size to address the fitting issue (With the extension for AR for better user experience)

TECHNICAL SKILLS

- Deep Learning, Natural Language Processing, Computer Vision
- Tensorflow, Keras, Pytorch, Scikit-Learn
- Mediapipe, HuggingFace
- Pandas, NumPy, Django, Flask, Streamlit, FastAPI
- AWS, Tableau, Elasticsearch, Docker, Jenkins
- Python, Unix, C++, Java, Javascript, Matlab