

BELETE BORU

Denver, CO 80249 · 641-233-9766 · belebo60@gmail.com · [linkedin.com/in/belete-semu](https://www.linkedin.com/in/belete-semu)

Machine Learning Engineer

SUMMARY

Passionate Data Scientist with 5+ years of experience in data analytics, data visualization, and modeling using Python, TensorFlow & MLOPs under GCP, AWS & Azure cloud platforms. Hands-on experience in developing prescriptive and descriptive machine and deep learning models for image recognition, object detection, and statistical time series modeling in supply chain, sales, marketing and maintenance business domains. Ability to uncover actionable insights from data, promoting a data driven decision (DDD) making culture. Experienced in multicultural environments, fostering strong communication skills for collaboration with cross-functional teams. Adheres to CRISP-DM and Agile methodologies, showcasing adaptability and proficiency in the field. Crypto and Blockchain technology enthusiast.

SKILLS

Languages: Python, Java, R, C++

Web Technologies: HTML5, CSS3, JavaScript, TypeScript, Web3

Web Services: Google Cloud, Microsoft Azure, AWS Cloud infrastructure, H2O, REST

Web/App Servers: Heroku, Apache Tomcat, Flask

Frameworks: Scikit-Learn, Tensorflow, Keras, PyTorch, Kedro, Spring, Node JS, Angular

Databases: MS SQL, MySQL, MongoDB, PostgreSQL

DS Techniques: Data Exploration, Data Cleaning, Data Mining, Feature Engineering, Convolutional Neural Networks (CNN), Fine Tuning, Transformers, Natural Language Processing (NLP), Large Language Models (LLM), Generative AI, Transfer Learning, AutoML, Anomaly Detection, Computer Vision, XGBoost, Algorithms, Machine Learning, Statistical Analysis, Optimization, A/B Testing, Airflow, MLOPs, Docker, Sentiment analysis, Classification, Clustering, ETL

SDLC: Agile Methodology (User Stories), Waterfall, Scrum

Tools: Git, SAS, Jupyter Notebook, PyCharm, VsCode, TensorFlow, Scikit-Learn, Pandas, NumPy, Matplotlib, Tableau, Power BI, Databricks, Apache Spark, Anaconda (Conda), Scipy, ChatGPT

Big Data: Hadoop, PySpark, Scala, Spark

Soft Skills : Collaborative, Strong Communication, Problem Solving

PROFESSIONAL EXPERIENCE

Data Scientist Leprino Foods Company

Denver, USA 01/2024-03/2024

US immigration employment status : F-1 CPT

Proof of Concept(PoC) for cheese make optimization Ai model

- Models of cheese make optimization using AWS sagemaker, S3 and EC2 and Scikit learn linear regression model, XGBoost regressor
- Performance analysis of Attention based deep neural network regressor for cheese make optimization
- Utilized Pandas and NumPy to perform feature engineering, data analysis and visualization

Technologies Used: Python, NumPy, Pandas, Scikit-learn, VSCode, AWS Sagemake, Machine learning, Deep learning, AWS EC2, S3

Data Scientist Tetra-Pak Packaging Solutions PLC Modena, Italy 10/2022-02/2023

Built AI models and Deployed on azure cloud

- Deployed Model using airflow in Azure Cloud, performed unit tests using Pytest, Implemented cross validation code to track and analyze model performance
- Utilized Pandas and NumPy to perform feature engineering and selection
- Formulated CRISP-DM business process for business understanding and problem definition, solution design and implementation, model evaluation, production deployment and maintenance.
- Performed Clinical trials with users to test the performance of the model in the field and gate domain expert opinion to fine tune model performance

Data Scientist Analyst Tetra-Pak Packaging Solutions PLC Modena, Italy 07/2019-09/2022

Built AI application using machine and deep learning algorithms

- Modeled and Optimised Facebook prophet, ARIMA, MA and ETS time series forecasting models to predict paperboard demand, maintenance technical issues and expected cost of poor quality
- Developed minimum value product(MVP) prototype using Logistic Regression and Random Forest to predict sales win probability
- Built recommendation systems that suggest design future with best sales correlation
- Developed python package to analyze and use AWS recognition API and Google cloud AI for text detection and image recognition
- Lead ongoing interaction and engagement with stakeholders for result presentation and requirements discussion
- Data analysis and Visualisation using PowerBi

Technologies Used: Python, NumPy, Pandas, Scikit-learn, PyCharm, Docker Container, Azure data lake, CRISP-DM, Agile methodology, machine learning, A/B testing, Pytest, Kedro, MIFlow, Databricks

Data Scientist Analyst Randstad Italia (Tetra-Pak Packaging Solutions PLC) Modena, Italy 07/2018-06/2019

Built AI application using machine and deep learning algorithms

- Designed, trained and modeled custom real time defect detection YOLO deep learning object detection algorithm using TensorFlow and PyTorch to detect defects on packages
- Implemented Fine tuning using custom datasets for package defect detection classes
- Built recommendation systems that suggest design future with best sales correlation

Technologies Used: Python, TensorFlow, PyTorch, Keras, JSON, PyCharm, Docker Container, Azure data lake, Jupyter Notebook, YOLO, AWS, Google Cloud, Docker Container, Azure data lake, PowerBi

Junior Automation Engineer (Tetra-Pak Packaging Solutions PLC) Modena, Italy 12/2017-06/2018

Built android based image recognition mobile applications.

- Built a custom android mobile application to run a deep learning image recognition model
- Implemented MobileNetV2, a state-of-the-art deep learning architecture, for efficient and accurate image recognition
- Implemented data augmentation techniques to enhance the quality and quantity of image training data set to tackle model overfitting
- Implemented transfer learning by fine-tuning the pre-trained MobileNetV2 model on the ImageNet dataset, leveraging existing knowledge for improved recognition accuracy
- Optimised, pruned, and implemented TensorFlow Lite for android mobile application, ensuring efficient performance and responsiveness on smartphones

Technologies Used: Tensorflow Lite, Computer Vision, Data Augmentation, Transfer Learning, CNN

ACADEMIC PROJECTS

Maharishi International University (02/2023)

- **Car Rental Application:** Developed an Enterprise Architecture based Car Rental Application using Spring Boot. Utilized Kafka, MongoDB, MySQL, JPA, Junit Test
 - **Loan Management System:** Developed web application that handles user authentication, data storage and loan processing. Utilized ExpressJS, TypeScript, MongoDB, Angular, JWT
 - **Shopping Cart:** Developed shopping cart web app using CSS, HTML, JavaScript and NodeJs
-

EDUCATION

- **MSc in Computer Science**, Maharishi International University, Fairfield, Iowa
(In progress via distance education; start Jan 2023, expected completion 10/2025)
 - **MSc in Telecommunication Engineering**, University of Trento, Trento, Italy (2016), From Sep 2013 - Dec 2016
 - **BSc in Electrical Engineering**, Hawassa University, SNNPR (2010), Hawassa, Ethiopia, From Sep 2006 - Jul 2010
-

CERTIFICATIONS

- Machine Learning, Stanford online on Coursera