Shriyansh Singh

+1 930 333 5141 | shriyansh.singh24@gmail.com | linkedin.com/in/shriyansh-bir-singh

SUMMARY

Innovative Machine Learning Scientist passionate about transforming complex healthcare data into actionable insights through rigorous research, deep learning, and collaborative teamwork

PROFESSIONAL EXPERIENCE

Machine Learning Scientist Intern *Apr 2024 – Dec 2024*

Hyphenova AI *Los Angeles, CA*

- Pioneered development of deep learning models using TensorFlow and PyTorch on clinical datasets, elevating prediction accuracy by 25%
- Leveraged transfer learning and ensemble strategies to curtail bias and diminish error rates by 20%
- Implemented automated hyperparameter tuning and cross-validation frameworks, expediting model refinement cycles by 30%
- Synthesized real-time performance metrics and custom dashboards to monitor model efficacy and articulate insights to multidisciplinary teams
- Partnered with clinical experts to align model objectives with healthcare payer priorities and regulatory standards

Machine Learning Scientist Intern *Feb 2023 – May 2024*

Enterprise Business Technologies Pvt. Ltd *Mumbai, India*

- Engineered sophisticated ensemble models and deep neural networks to forecast patient outcomes, achieving an 18% uplift in AUC scores
- Constructed advanced data preprocessing pipelines with Python and SQL, reducing manual wrangling by 50% and enhancing feature quality
- Conducted rigorous A/B testing and statistical analyses that optimized model performance and increased operational efficiency by 12%
- Designed interactive Tableau dashboards for comprehensive data visualization, reducing report turnaround time by 40%
- Collaborated cross-functionally to integrate clinical feedback into iterative model improvements, directly impacting patient care strategies

PROJECTS

Clinical Outcome Prediction using Deep MLP with Attention | *TensorFlow, PyTorch* *Nov 2023 – Feb 2024*

- Devised an advanced deep MLP architecture incorporating attention mechanisms and skip connections to predict patient outcomes, elevating AUC by 20%
- Formulated robust feature extraction and normalization pipelines with Python and Pandas to preprocess heterogeneous clinical datasets for enhanced model training

Clinical Notes Summarization and Concept Extraction | *BioBERT, Hugging Face Transformers* *Jul 2023 – Oct 2023*

- Created a domain-adapted transformer model utilizing BioBERT and Hugging Face Transformers to summarize clinical notes and extract key medical entities, improving retrieval efficiency by 25%
- Refined tokenization and embedding strategies on an annotated healthcare corpus to boost text classification accuracy and support diagnostic decision-making

EDUCATION

Indiana University Bloomington Indiana, United States

Master of Science in Data Science *Aug 2023 – May 2025*

- Relevant Coursework: Information Visualization, Data Mining, Applied ML, Statistics, Big Data Applications, Cloud Computing, Graph Analytics, Applied Database Technologies, Intelligent Systems

University of Mumbai Maharashtra, India

Bachelor of Engineering in Electronics *Aug 2019 – May 2023*

SKILLS

Programming: Python, SQL, C++
ML/DL Frameworks: TensorFlow, PyTorch, Keras, Scikit-learn, Hugging Face Transformers
Algorithms: Ensemble Methods, MLP, LSTM, Attention Mechanisms, Transfer Learning, Statistical Modeling
Data Processing: Pandas, NumPy, Apache Spark
Cloud Platforms: AWS (S3, EC2, SageMaker), Azure
Visualization: Tableau, Power BI
DevOps: Docker, Git