# Akhilesh Prashant Patil

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#### **EDUCATION**

University of Colorado Boulder

Master's in Data Science

Ramaiah Institute of Technology

Bachelor's in Computer Science

Aug. 2022 - May. 2024

ug. 2022 – May. 2024 Boulder, CO

Aug. 2015 – May. 2019

Bengaluru, India

# TECHNICAL SKILLS

Languages: Python, SQL, R, React Native

Data Science: Pandas, NumPy, Keras, TensorFlow, Plotly, Flask, Speech Recognition, Natural Language Processing, Hugging Face, Large Language Models, Langchain, Time-Series Analysis, Statistical Modeling, Long-Short Term Memory (LSTM), Recurrent Neural Network (R.N.N.'s)

Industry knowledge: Database Management, ETL (Extract, Transform, Load), Spark, Airflow, Container Orchestration - Docker, Agile Methodology, CI/CD Pipeline Design, Web Services Development (Flask, Django), SQL, Linux Operating System Cloud Technologies: Amazon Web Services, Google Cloud Platform, I.B.M Watson Cloud

# EXPERIENCE

# Startup Business Innovator

 $Jan.\ 2024-May\ 2024$ 

Broomfield, CO

idry Inc.

- · Contributing to the growth and success of a tech startup focused on revolutionizing the transportation industry.
- Spearheading marketing initiatives resulting in a 30% increase in user acquisition within the first 2 months of employment.

### Software Engineering Intern

May. 2023 – Aug. 2023

Samsung Research America

Mountain View, CA

- Elevated Bixby user recommendations via a 6-month data audit, significantly boosting engagement and satisfaction.
- Revitalized user engagement for 10+ million users by solving the cold start problem in natural language recommendations, resulting in a substantial reduction in bounce rates.

# Data Scientist - Advanced Analytics

Jun. 2019 – Jul. 2022

I.B.M India Pvt. Ltd.

Bengaluru, India

- Utilized Explainable A.I to identify the top 6 credit risk prediction features, boosting decision-making for banking clients.
- Directed code base development for deploying an audio emotion recognition module using deep learning, achieving a 78% increase in accuracy and enabling real-time emotion detection across diverse applications.
- Managed 50+ K.P.Is. for Sustainability Development client, fostering data-driven sustainability initiatives.
- Created a data-rich drug study analysis dashboard, leveraging nearly 5GB of electronic medical records to understand the efficacy and safety of a drug.
- Streamlined E.T.L. pipeline deployment on IBM Cloud, enhancing data workflow efficiency for 10+ daily client updates.

# PROJECTS

# ${\bf Natural\ Language\ Inference\ for\ Clinical\ Trials}\mid {\it Large\ Language\ Models}({\it LLM})$

- Engineered a deep learning framework for NLI using 2000 annotated CTRs, achieving 68% F1 score by fine-tuning hugging face models on PubMedBert for NLI.
- Implemented novel preprocessing to handle CTR terminology, reducing token length from over 500 to 130 tokens on average, and enhancing NLI efficiency.

# **StockBuff** | Python, Time-Series Forecasting, Dash/Plotly, Docker

- Developed a stock prediction system for FAANG tech giants, reducing RMSE error by 82% compared to univariate LSTM models, improving forecast accuracy.
- Integrated six years of stock data, news, and sentiment for robust LSTM model training, enhancing prediction reliability.
- Elevated investment decisions with SHAP and LIME techniques, enhancing transparency and accuracy by 20%.

#### Leadership Achievements

- Led the Data Science Club at C.U Boulder Data Science as Tech Chair, organizing hackathons for a cohort of 80+ students.
- Recieved the best project among a cohort of 60+ students for a Data Mining course at C.U Boulder
- Achieved recognition as the Course Facilitator of the month for demonstrating exceptional leadership in seamlessly integrating 2 new courses into the curriculum.
- Led dashboard and data management initiatives as a part of a 6-member team from I.B.M. at an inter-company hackathon at S.B.I. General Insurance in Mumbai.
- Received Manager's Choice Award at I.B.M. for delivering a high-impact dashboard with a 30% efficiency improvement, surpassing expectations on a tight deadline.