# Amulya Saxena

as7108@rit.edu | +1 (929) 613 6615 | www.linkedin.com/in/amulyasaxena | https://github.com/xlumzee

### **EDUCATION**

### Rochester Institute of Technology, Rochester, NY

Master of Science – Data Science

Current Courses: Predictive Analytics, Machine Intelligence, Database Design and Implementation, Applied Statistics, High Performance Data Science

University of Mumbai, Mumbai, India

Dec 2020 – Apr 2022

Aug 2022 – Dec 2024

Master of Science – Computer Science

Relevant Courses: Artificial Intelligence, Data Science and Analytics, Applied Math and Calculus

University of Mumbai, Mumbai, India

Jun 2017 – Oct 2020

Bachelor of Science - Computer Science

### **EXPERIENCE**

Data Axle, Pune, India

Jan 2022 – Jul 2022

Data Science Intern

- Engineered execution of data science pipelines, processing and analyzing over 60 gigabytes of data, resulting in 16% increase in data modeling accuracy leveraging machine learning techniques
- Recalibrated 2 pivotal industry projects: SIC Code Classification and an internal classification initiative, applying strategic planning in statistical modeling, APIs, and frameworks to attain a 20% improvement in initial model's performance
- Designed and optimized machine learning models for data categorization; revamped processing speed by 40% and accuracy by 30% deploying advanced natural language processing and data optimization methods
- Authored detailed documentation with report writing while following Agile methodology, using Confluence and Git to track project progress and support product development
- Delivered data driven presentations to senior leadership, including the MD, CTO, and CPO, influencing strategic decisions, and aiding in reduction of operation costs through effective data management and market research

### D2K Technologies, Mumbai, India

Dec 2020 - Jan 2021

Data Analyst Intern

- Analyzed semi-structured data from more than 1,000 websites, uncovering trends facilitating business decisions. Built dashboards producing a 5% improvement in database quality, highlighting data-driven insights in reorganizing data assets
- Implemented 500+ Python-based web crawlers for data mining, automating data collection and increasing data accuracy by 16%
- Devised and established efficient ETL workflows, streamlining data acquisition and processing; saved 7 hours of manual effort each week, revising overall data handling efficiency by 25%

### Golden Robot Animation, Mumbai, India

Apr 2019 - Jun 2019

Software Engineering Intern

- Boosted workflow efficiency in 2 major movie productions by refining Python scripts for 3D modeling and rendering, reducing script execution time
- Applied Python based database libraries to design graphical user interfaces (GUIs) and manage databases within Maya utilizing automated scripts to create and render 3D models

#### **PROJECTS**

# **Optimizing Trading Strategies Using Reinforcement Learning**

Jan 2024 – Sept 2024

- Enforced statistical inference, data transformation and exploratory analysis techniques to optimize predictive modeling in the DJI Index to establish a baseline, generating a 30% increase in accuracy.
- Presently implementing an autonomous, data-driven trading system by using reinforcement learning algorithms to learn trading methods including mean reversion and breakout strategies.

### **Credit Risk Analysis**

**Sept 2023 – Dec 2023** 

- Leveraged predictive analytics on a real-world dataset of 887K loan applications. Achieved a 91.97% accuracy in identifying potential credit defaulters using Random Forest, contributing to sustainable risk management
- Applied advanced algorithms to predict loan defaulters. Engineered a Neural Network and obtained a remarkable 92.25% ROC AUC.
   Demonstrated expertise in enhancing financial decision-making and reducing losses

## **SKILLS**

Languages/Tools: Python, React, Java, R, SQL, Jmp, MATLAB, Tableau, JIRA, Confluence, Docker, Git, AWS, JavaScript, MS Excel Frameworks/Libraries: TensorFlow, PyTorch, Keras, SciPy, NumPy, Pandas, Scikit Learn, Matplotlib, OpenCV, NLTK Certifications: AWS Certified Cloud Practitioner CLF – C02, Bloomberg Finance Fundamentals