Bikash Gurung

Location: London, UK
Phone: 07436598867
Email: bikash.grg.uk@gmail.com
LinkedIn: https://www.linkedin.com/in/bikash-grg/

PROFILE

As a recent graduate with a Master's degree, I am an analytical and detail-oriented individual with a passion for finding insights and patterns within complex data sets. With a strong background in data science and programming, I have experience working with large data sets to develop machine learning models. With over two years of professional experience, including a programmer analyst internship, I have a proven track record of working effectively with cross-functional teams and can work independently to drive projects forward. In addition to my technical skills, I excel at communication, critical thinking and thrive in collaborative and agile environments. I am seeking a data scientist position where I can apply my skills to benefit the organisation success.

EDUCATION

Liverpool John Moores University, UK **Sep 2021 – Sep 2022**
MSc. Artificial Intelligence (Grade – First)
Key Modules: Machine Learning, Deep Learning, Accelerated Machine Learning, Enterprise Machine Learning, Advanced Topics in Deep Learning

Lovely Professional University, Punjab, India **Aug 2015 – May 2019**
Bachelor of Technology Computer Science and Engineering (Grade – 2:1)
Key Modules: Object Oriented Programming, Data Structures and Algorithms, Database Management System, Python Programming, Discrete Mathematics, Probability and Statistics

SKILLS

- **Programming Languages**: Python, Java, C/C++, HTML, JavaScript, CSS, SQL
- **Frameworks and Libraries:** TensorFlow, Apache Spark, RAPIDS, Flask, Docker, Python (scikit-learn, NumPy, pandas, matplotlib, seaborn etc.), Power BI, Tableau
- **Others**: Bootstrap, Android Studio, WordPress, JIRA, GIT, GitHub, Google Cloud Platform

WORK EXPERIENCE

SHL, Gurugram, India **Sep 2019 – Apr 2021**
Management Trainee (IT)

- End-to-end development and deployment of IT assessments by conductive extensive research to design assessment blueprints and creating test items for diverse computer science technologies which resulted in highly accurate and comprehensive assessments that met or exceeded client expectations.
- Earned the prestigious Employee of the Quarter award by completing successful projects for multiple Fortune 500 companies ahead of schedule, showcasing my outstanding contributions and dedication to the job.
- Improved cross-functional collaboration and issue resolution in JIRA by actively participating in the bug life cycle and defect tracking activities, which resulted in faster resolution times and enhanced teamwork skills.
- Ensured code accuracy by executing rigorous testing on the relevant platforms and conducting meticulous translation reviews, resulting in error-free code deployment.
- Increased team productivity by 33% by conducting comprehensive training meetings and workload assessments for newly hired employees in accordance with the company's best practices and regulatory guidelines.
- Improved the quality of assessments by engaging external subject matter experts in niche IT skills, resulting in a 20% increase in assessment accuracy and higher client satisfaction levels.

Cognizant, Pune, India **Jan 2019 – Apr 2019**
Programmer Analyst Trainee – Intern

- Gained hands-on experience in full-stack development by completing a rigorous 4-month internship program, which allowed me to apply classroom knowledge to real-world scenarios.
- Worked collaboratively with cross-functional teams, including other developers, business analysts and project managers, to ensure project deadlines and goals were met.
- Developed and tested new website features and functionality, including creating and executing test cases, debugging code and implementing changes based on feedback.
- Improved the usability experience by 40% by implementing a web application using Spring MVC patterns, HTML/CSS, JavaScript and Bootstrap, resulting in increased user satisfaction and efficiency.
- Demonstrated exceptional proficiency in software development and strengthened my professional skills such as collaboration, communication, and problem-solving during my internship which led to the offer of full-time employment.

PROJECT EXPERIENCE

MSc Dissertation: Machine learning model was developed using unsupervised clustering algorithms and statistical data to group all the players in full detail to assist the actual coach in making decisions before, during, or after the game that will help a team win the match and ultimately trophies or leagues. The entire dissertation was well-structured, datasets were properly analysed using data analysis and advanced analytical techniques to develop the model and the dissertation included a model lifecycle management too. Finally, the model was deployed using model deployment tools Flask and Docker.

Enterprise website: Built an enterprise-ready web application using Flask for detecting birds with the help of bird species detection model which was developed during first semester. Inferencing is done using TensorFlow serving with Docker via the gRPC communications protocol.

Environment Sound Classification: Using multilayer perceptron (MLP) neural network, built a predictive model to predict environmental sounds and compare it to a Random Forest algorithm to help prevent and detect crimes. Librosa with MFCC was used to analyse data and extract features from 8732 short audio files (time-series dataset) which was labeled into 10 classes. MLP model has the highest accuracy of 92.73%, while Random Forest model has 61.11%.

Higgs Boson Detector: Constructed the predictive machine learning models using a HIGGS big data set to identify the signal that produce Higgs boson using the Random Forest algorithm and compared it to XGBoost model. To compare performance, both models were performed in GPU using RAPIDS and then on CPU. In terms of accuracy, the CPU (74.05%) slightly beats the GPU (74.05%) in RF, Also, in XGBoost, CPU (83.45%) performs slightly better than GPU (83.30%). But in terms of training time, GPU was 177 times quicker in RF and 300 times faster in XGBoost when compared to CPU.

Bird Species Detection: Created a deep learning computer vision model pipeline for detecting three bird species using Faster R-CNN (Convolutional Neural Networks) model and compared its performance to SSD MobileNet technique. ReNomTAG was used to tag 2400 images (800 each), and TensorBoard was utilised to visualise and evaluate the performance. SSD MobileNet had an accuracy of 72%, whereas Faster R-CNN had an accuracy of 89%.

CERTIFICATIONS

- Learn Python 3 Course – Codecademy
- Structuring Machine Learning Projects – Coursera
- JavaScript: Understanding the weird parts – Udemy

REFERENCES

References available upon request