

Priyanshu Shrivastava

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TECHNICAL SKILLS

Languages: Java, JavaScript, Python, C++, SQL, BASH
DBMS/Frameworks: MySQL, MongoDB, Firebase, DynamoDB, S3, Flask, Next.js, React, Node.js, Spring Boot, REST, Spark
Tools: AWS, Jenkins, Maven, Docker, Kubernetes, ArcGIS, BitBucket, Databricks, Datadog, Tableau

INDUSTRY EXPERIENCE

Software Developer - (New Jersey Turnpike Authority, Woodbridge, NJ) July 2024 – Ongoing
Tech Used: Python, REST, SOAP, Postman, EAM, ArcGIS Pro, eGIS

- Implemented a API communication pipeline between Enterprise Asset Management System(SOAP) and Fluid Management System(REST) to maintain and manage fluid dispense information at NJTA Depots
- Created a Linear Referencing System to incorporate new ramps acquired for Garden State Parkway routes by NJTA in enterprise geographic information system using ArcGIS Pro
- Designed a communication pipeline between Loadrite(Loader Weighing Scale System) and NWOS(NJTA Weather Operation System) to maintain Salt inventory during winter season

Data Engineer - (Kaaye Technologies LTD, Navi Mumbai, India) Nov 2020 – Oct 2021
Tech Used: Spark, TensorFlow, MongoDB, Tableau

- Revamped predictive forecast and classification models (LSTM, SVM) by leveraging Apache Spark for efficient distributed data processing, which resulted in scalable data storage using MongoDB and reduced processing time by 40%
- Achieved model accuracies between 85-95% by analyzing historical data to identify past trends, which resulted in providing solutions to 5 retail-based clients, increasing their sales by an average of 15%

Machine Learning Intern - (ValueFirst, Gurgaon, India) Feb 2020 – Aug 2020
Tech Used: Python, Pytorch, NLTK, RASA, PyTesseract, TensorFlow

- Collaborated on an internal project to fully automate the employee onboarding process by reducing manual intervention by 35-50%, which resulted in efficient document verification and information extraction, saving significant time
- Built a Naive Bayes classifier for email spam detection by achieving 95% accuracy, which resulted in effective spam filtering

RESEARCH EXPERIENCE

Research Assistant - (Plant Biology Department, New Brunswick, NJ) Apr 2023 – May 2024
Tech Used: Python, PyTorch, DJI Mavic 3

- Modelled a VGG-19 classification model for phenotyping 7 different turfgrass species to improve the efficiency and remove a targeted bias of manual phenotyping
- Generated a Graphical Pedegree dataset for 12 species of turfgrass to obtain a Family link of any plant from any year using a recursive query to maintain dynamism

Research Assistant - (Durandal Lab, Piscataway, NJ) Nov 2023 – May 2024
Tech Used: Python, PyTorch, Flask, AWS, FFmpeg

- Hosted a real-time live streaming web application on AWS EC2 using Flask by collecting frames from the PSDK module of Yolov5, which resulted in converting them to 15fps video clips using FFmpeg, reducing latency by 20%
- Improved the efficiency of the number of images produced by the Yolov5 module by 25%, which resulted in the detection of the speed of the vehicles from 12 images per second to 15 images per second, enhancing detection accuracy by 25%

PROJECTS

Car renting website – REYOCA (rent your car) Dec 2023
Tech Used: Node.js, MySQL, AWS, Maps API, Stripe API [\(GitHub Link\)](#)

- Deployed a website on EC2 instance, successfully mirroring the functionality of a car renting website integrating features like authentication, and session management using OAuth
- Incorporated the Stripe API and map API into the application for secure payment processing and navigational authenticity for real-time tracking

Video chat web application using WebRTC Apr 2023
Tech Used: JavaScript, React.js, WebRTC [\(GitHub Link\)](#)

- Developed a Harry Potter-themed P2P video chat application using WebRTC, with cross-platform compatibility and network-independent calls with seamless real-time connection in under 127ms
- Tested across diverse network environments(LAN, MAN), the application demonstrated robust performance metrics, significantly enhancing the user experience with a latency of 47ms

PUBLICATIONS

International Journal of Engineering and Advanced Technology (IJEAT) Oct 2021
[Classification of Grains and Quality Analysis using Deep Learning](#) [Google Scholar](#)

EDUCATION

Rutgers University Sep 2022 - May 2024
Master of Science - Computer Science *GPA: 3.92*