

Rupesh Shrestha

📍 Dallas, Texas, USA ✉ rshrestha9@lamar.edu ☎ +14094449238 in <https://www.linkedin.com/in/rshrestha9/>

🔗 <https://github.com/ruptaker> 🖱 www.rupeshshrestha.com

SIGNATURE COMPETENCIES

Full Stack Java Developer, Machine learning Engineer, Data and Quantitative Analysis, debugging, Creating Web Application, Creating Rest Api's, Clustering models and Good verbal, written, analytical, persuasive skills, Maintaining CI/CD tools

TECHNICAL PROFICIENCIES AND TOOLS

Programming Language:, Java, Python, Go, JavaScript

Database:, Relational(SQL), MongoDB

Tools & Platform/Frameworks:, Agile Methodology, GIT/GITHUB, Angular Js, React Js, AWS, Spring Framework, Hibernate, Spring Boot, Scikit-learn, MLOps, Keras, Lambda, Numpy, Pandas, Seaborn, UNIX

Operating System:, Windows, Linux

Education

01/2021 – 08/2022
Beaumont, USA

Master's in Computer Science, Lamar University

GPA : 3.7/4.0

NOTABLE COURSES: Data Science, Cloud Computing, Analysis of Algorithm, AI, Operating System, Database, Software Engineering,

2016 – 2020
Istanbul, Turkey

Bachelor in Aeronautical Engineering, Istanbul Technical University

Professional Experience

08/2021 – 08/2022
Beaumont, USA

Graduate Teaching Assistant, Lamar University

● Conducted Lab sessions in collaboration with the professors and actively tutored students for COSC 1173: Programming Lab

● Maintained an atmosphere of academic learning, leadership, and advancement to facilitate the learning and development of critical thinking skills.

● TA for COSC 1173: Programming Fundamentals (Java), COSC 1337 Programming Fundamentals II, COSC 1174 Foundation of Computing II, COSC 3302 Intro to Computer Theory, and COSC 5340 Data Science

● Graded assignments, and tutored individuals as well as proctored examinations.

03/2018 – 01/2020
Istanbul, Turkey

Software Developer, Furmak Machinerics

● Develop the UI component architecture using HTML, CSS, and JAVASCRIPT

● Created a web application with Spring, MongoDB, and Core Java.

● Using Spring Cloud, Spring Boot, and Spring Integration, create microservices and APIs.

● Spring Boot Framework was used to create the application, while Spring Security was used to manage security.

● Mx payment gateways for making credit card payments and to setup Autopay

Projects

Predicting Flight Price with different Machine learning Techniques

● Statistical Analysis of the supervised and unsupervised models

● Predicting Flight ticket prices with various scalable predictive models and algorithms using Machine learning models (artificial intelligence AI algorithm) such as Random forest, Linear regression, Decision tree, and Extra tree regressor.

● Used Python to deploy the Machine Learning Algorithms

● Created Website to link with Flask web app using HTML and CSS

● Used AWS EC2 hosting to host the website,

● Also deployed Flask web app to predict the flight price based on required information.

FITNESS FREAK, Gym Fitness Exercise app

● Users can choose exercise according to the body parts which they want to enhance.

● Used advanced React frameworks like folder and file structure and hook.

● Created User Interface using Material UI

● Fetch data from unlimited sources using Rapid API.

Data visualization of Nepal's Earthquake

- Quantitative Analytics of the data
- Analyzed raw data for data modeling, data cleaning, and data analysis.
- Incorporated the Python Big Data libraries - Pandas and NumPy to calculate the interdependency of at least 8 different attributes of Nepal's Earthquake Dataset.
- Analyzed the resulting information using different visualizations. methods such as Box Plot, Scatter Plot

Chat Server

- Implemented an RPC chat client/server using the programming GoLang.
- Testing, Code reviews with other team members.
- Connected school server with the help of FortiClient VPN and with the help of WINSXP, transferred file server. go and client.go.
- Connect to the school Linux server through the help of PUTTY

BUG MANIA (ANDROID GAME)

- Created a 2D Android video gaming application using Android 4.4 in Android Studio.
- It includes three preference screens which include the home screen, high score page, and the actual game
- screen.
- Integrated physical world with virtual using APIs through which users smash different types of bugs with their
- fingers and score points relative to the type of bug they have squished.

Organizations

08/2021 – 08/2022

Nepalese Student Association, President

- Represent the organization in its dealings with the University and community at large.
- Preside over the meetings of the organization and function
- Appoint chairpersons to special committees as the need arises to complete the work of the organization and to call special meetings as necessary as provided

THESIS RESEARCH PAPERS

2022

AIRLINE FLIGHT PREDICTION USING MACHINE LEARNING TECHNIQUES

- Used the dataset provided by the Department of Transportation Office of the Assistant Secretary for Aviation and International Affairs.
- We chose several machine learning algorithms techniques such as Random Forest, Decision Tree regressor, Extra Tree Regressor, Linear Regressor, and Lasso Regressor to predict the flight price.
- After applying all these Machine learning algorithms, we find that Random forest predicts the flight price with least error

2020

ECONOMISATION OF AIRPORTS AND AIRCRAFT MAINTENANCE,

- Using Computer Science and Data Science in Airports and Aviation Maintenance
- Analyzed Tribhuvan International Airport in Nepal and Istanbul Airport in Turkey.