PRASIDDHA KHADKA

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- ★ Results-driven software engineer with experience in software development and healthcare administration
- ★ Completed Post-Graduate studies from Birkbeck, University of London MSc Advanced Computing Technologies
- ★ Transitioned from Intern to Senior Software Engineer in previous tech role at US Healthcare Analytics Provider company Deerwalk Services Private Limited
- ★ Proficient in Java, Grails, Spring, ElasticStack, Python, Kibana, SQL, Git, JavaScript (Node.js and React.js), MongoDB, AWS(S3, SQS, CloudWatch, Lambda), R
- ★ Developed ML backed web application for MSc project called 'Creative Image Caption Generator' using Django backend and React frontend employing Convolutional Neural Network Long Short-Term Memory merge architecture
- ★ Proficient in Waterfall and Agile methodologies with experience of mentoring junior developers.
- ★ Passion for continuous learning and staying updated on emerging technologies
- ★ Confidence to pick up any programming language/framework on requirement due to strong fundamentals in Data Structure and Algorithms

Web Application Development • Software Development & Implementation • Application testing & Debugging • Framework Development • API Design, Development & Documentation • System Integration & Migration • Database Design & Management • Requirements Handling • System Design • Backend Development • Data Analytics • Machine Learning

PROGRAMMING LANGUAGES & TECHNOLOGIES

Languages: JAVA, Python, SQL, Javascript(Nodejs and Reactjs), HTML, CSS, R **Technologies**: Grails(Groovy, Spring, Hibernate), Elasticsearch, Git, MongoDB, Kibana, AWS(CloudWatch, S3, EC2, SQS), R, Docker, Kubernetes, Gradle, Maven

EDUCATION

Birkbeck, University of London

Oct 2022 - Dec 2023

MSc Advanced Computing Technologies Merit - 69.5%

Advances in Data Management
Applied Machine Learning
Cloud Computing
Data Analytics Using R
Data Science Techniques and Applications
Information and Network Security
Software Design and Programming
MSc Advanced Computing Technologies Project
Neural Networks and Deep Learning

WORK EXPERIENCE

Deerwalk Services Private Limited

Sep 2019 - Jun 2022

Senior Software Engineer: Jan 2022 - Jun 2022

Software Engineer: May 2020 - Dec 2021

Associate Software Engineer: May 2019 - Apr 2020

Intern: Sep 2018 - Apr 2019

- Progression from Intern to Senior Software Engineer: Demonstrated consistent growth and contribution to the team, starting as an intern and progressing to the role of Senior Software Engineer.
- Led Optimization and Version Upgrades: Enhanced data retrieval efficiency by optimizing Elasticsearch queries and upgrading versions from Elasticsearch 2 to 7. Additionally, upgraded JDK and Grails versions to leverage new features. These upgrades resulted in a significant reduction in report generation timing from 30 seconds to approximately 10-12 seconds, improving overall system performance.
- Mentored Junior Developers and Collaborated with Teams: Mentored junior developers, fostering their skills in data analysis and software development. Actively participated in cross-functional meetings, providing insights for feature enhancements and task assignments. Utilized project management tools for adding tickets for issues and enhancements, contributing to a significant increase in team efficiency measured via bug fixing and project feature delivery time.
- Implemented System Enhancements and New Features: Implemented Elasticsearch and SQL Query caching using Redis, reducing response times to an average of 2-3 seconds and improving system performance by 25%. Redesigned and implemented various existing modules, leveraging Java concurrency, enhancing user capabilities, and increasing user satisfaction. Jenkins was utilized for build automation, ensuring efficient deployment processes.
- Conducted Research and Implemented Solutions: Conducted research on Elastic App Search integration and implemented nested Terms aggregations in Elasticsearch. These initiatives improved keyword search efficiency by 40% and facilitated data aggregation, resulting in a 15% increase in data analysis capabilities.
- Ensured System Reliability and Stability: Monitored and analyzed production EC2 instance failures, recommending scaling solutions to enhance system reliability. Utilized Python scripts for EC2 instance monitoring. Investigated backend application logs via AWS CloudWatch, ensuring data integrity and performance, leading to a 20% reduction in system downtime.
- Handled Legacy Projects and Bug Fixes: Successfully managed legacy projects, addressing major bug fixes and contributing to minor report creation efforts. Utilized project management tools for issue tracking. Deployed crucial projects, resulting in a 15% increase in system stability and improved user experience.

PROJECTS

Creative Image Caption Generator - MSc Project

- Web-based application using Django backend and React frontend enabling users to train custom machine learning models for generating captions from uploaded images, with options to select training/testing data amounts and download model architecture
- A supervised learning approach utilized Convolutional Neural Network Long Short-Term Memory merge architecture trained on the Flickr8k dataset, illustrating the impact of data quantity in supervised machine learning

SayIt!

 Cloud SaaS API where users can post their thoughts, views, or criticisms for everyone to see while other users can browse and interact by providing comments and likes. Developed using Node.js and MongoDB.

Data Science

• Dimensionality analysis of Company Bankruptcy Prediction available on Kaggle

Doodle Classifier:

 A machine learning based web platform developed using p5.js and Processing that predicts the user drawn doodle in the web browser. A supervised learning approach which utilizes basic Convolutional Neural Network architecture trained with doodles from Google's QuickDraw repository.

Fohor Aayo

 Android application developed to send notifications to users regarding any garbage collection activity to solve the problem of untimely garbage collection problem in Nepal. Utilized Firebase messaging for notification updates.

Discount Room

 Android application which lists all the discount providing stores that are followed by the users

VOLUNTEERING AND SOCIAL SERVICES

- Initiated and successfully completed public school cleaning campaigns in Kathmandu by setting up agreements with the schools, teachers, volunteers and administration of Deerwalk Services Private Limited, managing travel and fooding services to the volunteering team.
- Volunteered multiple hikings and trekkings to different rural villages of Nepal managing the whole journey, expenses and accommodation to meet the demands for at most 80 people.
- Distributed water bottles, books, notebooks, pens and other stationary items to kids in rural villages.
- Volunteered Job Fairs in colleges such that the Job Fair could be run without any unusual circumstances.
- Volunteered to distribute foods and other essential items after the massive Earthquake damage in Nepal during April 2015.
- A member of Red Cross Society in Nepal Bhaktapur volunteering in Blood Donation and society cleaning campaigns.