Gurpreet Singh

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♣ gurpreet.singh/porfolio/

Education

Santa Clara University – Santa Clara, CA

June 2024

Master of Science: Computer Science and Engineering

Amity University – Noida, IN

Aug 2016 - May 2020

Bachelor of Technology: Computer Science and Engineering; GPA: 3.8/4

Coursework: Operating systems, Object Oriented Design, Data structures and algorithms, Data Analytics

Skills Summary

• Languages: JavaScript, Python, MySQL, JSONSchema, Django

• Web Development: Node JS, DB, APIs, Unit and integration tests, React, Microservices, Web design principles

• Developer Tools: Git, Github, Azure Cloud, Postman, Linux operating system, VS, Task prioritization

• Soft Skills: Team player, Motivated, Adaptable, Initiative taker, Flexible to changes, Detailed oriented

• DevOps & Cloud: Docker/Kubernetes, Jenkins, CI/CD pipelines, Infrastructure as a Code(YAML), Microsoft Azure

• Others: Product development process ceremonies, Peer code review, Technical design documentation

Professional Experience

Hanu Software – Noida, IN

June 2020 - August 2022

Senior Cloud Software Developer

- Collaborated with software development team to meet end-user product requirement of re-design, re-building and enhancements of monolithic healthcare revenue web application to scalable, service oriented application which ensures, stability, and security; Extracted and implemented legacy services into independent micro-services using best practices and well-documented REST-ful APIs; Implementation of solution removed the tight coupling by 80% and flexible customer-facing features development
- collaborated with a deployment team of 5 to designed, built, and configured CI/CD pipelines to sustain high productivity levels using best deployment techniques. Load-based horizontal/vertical scaling of K8's pods/Nodes; Setup reverse proxies using Nginx; Implementation resulted in 99.9 % application availability and 100% end-user satisfaction

South Side Medical Services - Noida, IN

Jan 2020 - April 2020

Software Developer Intern

- Collaborated with team of 7 to train complex Artificial Intelligence models for classifying pharmacy patients with low adherence level based on the custom metric (Medical Possession Ratio). Implemented python script for data augmentation; gathered and parsed over a million record of JSON drugs' data from 'OpenFDA' API endpoint
- Performed EDA, features selection, features computation; Resulted in increase in model evaluation metric by 45%

High Performance Cloud Computing Center, UTP, - Perak, Malaysia

May 2019 - July 2019

Deep Learning Research Assistant

• Investigated and implemented an innovative Neural Network model as a surrogate for meta heuristic algorithm to solve the problem of time complexity of expensive genetic algorithm's fitness function with 92.5% accuracy

Projects

Jeweller's Munim – Jewellery Software (.Net Core(Backend), C#, React, Rest APIs, Azure)

May 2022 - Present

• Developed secure, efficient, observable and scalable Jewellery portal in cloud-connected platform to address real-time problem of manually maintaining jewellery's accountancy, stock, customers' details and gold loan.

Attendance Application using Facial Recognition (Python, Qt-Designer, Machine Learning)

June 2021

• Developed desktop based attendance application with feature of clock in and clock out; Detects the facial features using CNN and classify them using linear classification model. Resulted test accuracy was found to be 95.12%

Skin Cancer Detection Mobile Application Using CNN with Transfer Learning (Python) Jan 2020 – May 2020

- Implemented CNN with transfer learning to detect the position and classify the skin cancer into three categories Melanoma, Dermatofibroma, and Benign Keratosis lesions
- Implemented and trained Inception model with transfer learning on the three categories of skins cancer images in HAM10000 data set which results in test accuracy of 97.5%

Leadership / Extracurricular / Publications

Runner's Up at Hanu Cloud Hackathon 2021 (Second Place)

June 2021

Jan 2019

Research Paper: Hybrid Prediction Model for Rainfall Forecasting, IEEE Explorer

Jan 2018 - Jan 2019 Dell Campus Ambassador