Nishanth G
< /Software Engineer >

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Portfolio	Linked_In	Medium	HackerRank

Experience

G2, Bangalore-- Software Engineer II July 2022 – Present

Project - G2 track is a one platform to easily manage and optimize a company's software. Identify, map, and monitor all software and spend in one, unified location and track employee's usage trends and find tools worth the team's investment.

- My responsibilities in the Track team included designing and building SSO integrations for various clients, which involved real-time tracking, processing, and mapping of individual instances of each application for customers to provide actionable insights which is responsible for saving approx **25% of customers revenue**
- Built Sidekiq job systems in place to support asynchronous, reliable message processing with batched jobs, priority queue, and job death handlers, improving the speed of real-time data processing by **10 times**.
- Ownership of **Azure, Gsutie, Atlassian** SSO integrations
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Zuora, Chennai -- Software Engineer II October 2021 - Present

Project - Zuora Revenue is a revenue automation software that automates and manages every process in the revenue cycle and canprovide you with real-time insights to instantly recognize, reconcile, and analyze revenue for subscriptions, products, and usage-based services.

- My responsibilities in the Revenue team were designing and building integration pipeline between Zuora Revenue and ZuoraBilling which involves transfer and processing of Terabytes of Data in near real time which is responsible for driving **30% of Zuora's revenue**
- Ownership of Microservices which involves collecting ,processing and mapping of data between Revenue and Billing through RESTful API's which are built on top of Flask, integrated thorugh Jenkins pipeline with AWS ECS Fargate and AWS EC2 based ECS Cluster
- Optimize performance of Zuora Revenue by fixing throughput limitation of data transfer in the pipeline by introducing Target groups and asynchronous callbacks which increased data transfer size **by x5 times the original design**
- Manage and Build CI/CD pipelines with Integrating Automated Testing
- Conducts Daily stand up and takes responsibility for the deployment of all services and builds under Zuora Revenue
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Mad Street Den, Chennai — Software Engineer June 2019 - October 2021

Project - VueModel which is an Automated On-Model Fashion Imagery solution that helps improve engagement and conversions onE-Commerce platforms using ML and AI

- Development and Administration of Highly Scalable Systems and Microservices that are built to handle and support 3-D ModelGeneration using Generative Adversarial Networks in real time
- Built Deep Learning algorithm to determine 3-D Object Orientation from image using OpenPose and ResNet -50
- Implemented and Configured auto scaling policies that saved **roughly 45 % of infrastructure cost**
- Optimize performance and Enhanced data processing speed by tuning complex SQL queries , handling Asynchronous tasks whiletaking advantage of redis queues , multiprocessing and generators
- Re-engineered data pipelines that communicate to and from Microservices during training and testing phases of the generativemodel to handle and support large bandwidth of data with the help of creating and managing specific target groups
- Mentored junior developers on the team and document best practices within the organization
- single-handedly built and maintained infrastructure and Backend during initial stages of Project
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Skills

- **Language** : Python,Ruby, c++
- **Technology**: AWS, Sidekiq, Redis, nginx, Jenkins, Docker, NumPy, Pandas, scikit-learn, OpenCV, Semaphoreci, Terraform
- **Frameworks**: Django, Flask, Rails, PyTorch, TF, Keras
- **DB**: PostgreSQL, Redshift, DynamoDB

Education

PSG College of Technology, Coimbatore — B-Tech IT (2015 - 2019)

- Graduated with First Class Honors and a **GPA of 8.66/10**

Additional Courses

- **NPTEL Machine learning course from IIT (6 - months)**: Elite Certificate in Machine learning
- **Basics of AI(1 semester)**: 9/10 GPA
- **Advanced Linear Algebra (1 semester)**: 8/10 GPA

Projects

Automated Segmentation of Breast Lesions using Deep Neural Network

- Semantic Segmentation of Mammographic Images to Identify Abnormal Lesions using CNN.
- We try to segment and to classify breast lesions from mammography images. To achieve segmentation and mask generation of breast lesions, we use the U-Net architecture . U-Nets train faster and require a lower number of training labeled images, since annotations are difficult. Convolutional networks are employed to classify the lesion from the U-Net output as either Benign or Malignant. Conv-nets are not only improving for whole-image classification, but also making progress on local tasks with structured output. These include advances in bounding box detection, part and key-point prediction and local correspondence.
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Extracting text from images with Tesseract OCR, OpenCV, and CNN

- A table detection, cell recognition and text extraction algorithm to convert tables in images to excel files
- The algorithm consists of three parts: the first is the table detection and cell recognition with Open CV, the second the thorough allocation of the cells to the proper row and column and the third part is the extraction of each allocated cell through Optical Character Recognition (OCR) with pytesseract along with passing data which could not be identified by OCR through a conventional CNN
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Visual Speech Recognition

- Visual speech Recognition aims at transcribing lip movements into readable text. The system will convert an input video into transcripted text
- The technique uses viseme and phoneme matching, where visemes are particular lip moments and phonemes are corresponding sounds that can be converted into text. In recent years, there have been many advances in automatic speech reading system with the inclusion of audio and visual speech features to recognize words even under noisy conditions. Our model focuses mainly on the visual element, while a good system uses the visual segment as a support for the acoustic segment.
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Modern Face Recognition with DeepLearning

- Face Recognition using Histogram of Oriented Gradients(HOG)
- Face recognition is done using HOG technique with an inclusion of a real time subject to evaluate the performance of the algorithm. The feature vectors generated by HOG descriptor are used to train Support Vector Machines (SVM) and results are verified against a given test input. The proposed method checks whether a test image in different pose and lighting conditions is matched correctly with trained images of the facial database. The results of the proposed approach will detect the faces in an image and recognise and say who they are
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Portfolio and List of all remaining Projects — Detail: View All Projects

Strengths

- Creative
- Dedicated
- Detail Oriented
- Effective communication

Language

- English
- Telugu
- Tamil