

VIVEK REDDY

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◇ [GitHub](#) ◇ [Linkedin](#) ◇ [Codeforces](#)

EDUCATION

Birla Institute of Technology and Science, Pilani

Hyderabad, India

Bachelor of Engineering (Hons.), Computer Science - 7.64/10

Aug 2015 - Aug 2019

Fiitjee Junior College

Hyderabad, India

Board of Telangana for Senior Secondary Education, PCM - 97.1%

Jun 2013 - Jun 2015

WORK EXPERIENCE

Publicis Sapient, India

July 2019 - Present

Software Development Engineer - 1

Scalable Notification System

- Built a scalable notification system for bank/e-commerce website for sending bulk messages with a Service Level Agreement of 100,000 messages in a second, wherein the architecture could be lifted and shifted in other use cases
- Implemented Otp service as a kafka stream to leverage the benefits of kafka's server side cluster technology and verification of otp was done using a redis cache

Financial Assistant Application

- Built an inhouse open banking application to provide insights to customers about their financial status on a monthly basis
- Built a cross-platform app for voice platforms like Alexa & Google Assistant using jovo framework

New Digital Bank on the Cloud

- Moving bank operations from on-premises legacy infrastructure to a redesigned infrastructure on Google cloud ensuring zero data loss and minimal disruption to business operations
- Designed the architecture for automation of backup and on-demand recovery of spanner databases. Met the Recovery Time Objective of 2hrs for 350,000 records in databases
- Created a Dashboard that monitors deletions of any resource and few crucial metrics of google cloud resources like Pub/Sub, Bigquery, Spanner and Dataflow
- Personalised **protoc-gen-bq-schema** plugin for ingesting protobufs of up-streams from Pub/Sub to Bigquery through ETL pipelines, that were built using Apache beam and Google Dataflow development, thereby enabling down-streams to consume
- Modeled Strategy and implementation of versioning for Cloud Spanner databases using Liquibase (tracking and applying database schema changes)
- Developed a dataflow pipeline in java using apache beam sdk from pub/sub to spanner & spanner to cloud storage for testing spanner read/write performance

Reliance Jio, India

Jan 2019 - Jun 2019

Software Development Intern

Fishery Forecast Application Development

- Machli, an Android application for fishermen is an attempt which combines two sections, "Breaking the English exclusivity of digital space and "Bridging information asymmetry for fishermen"
- Improved the efficiency of the response time of the backend application to less than 1s from 3s by writing a parsing script with O(n) complexity for the XML scripts that are published on FTP server by Indian National Centre for Ocean Information Services

- Machli” (app for fishermen) won the Aegis Graham Bell Award 2019 under the Application for Social Good category. The award is a recognition for how AI can create deep and large-scale impact and improve lives [\[Machli app\]](#)

Reliance Foundation Application Development

- Built a location service that returns (latitude and longitude) of a given position
- Knowledge Ingestion of 0.6 million Agricultural entity instances into MongoDB using Scrapy
- Built a User interface where a user can upload village wise and farmer wise data and places in two separate directories in Soil Health Card
- Developed a testing Framework for various microservices that are managed by API Gateway using JSON Schema that helped in fixing the bugs that are published by a wrong payload

Telangana e-governance

Apr 2017 - Jun 2017

Software Developer Intern [\[Source Code\]](#)

- Building an End-to-End **Document Classifier** that classified different types of documents, and its Integration with MeeSeva (Service to Citizens) portal
- Pre-processing using Canny edge detection, Classification of Preprocessed Data of almost 8500 documents into 12 different categories
- Making a Model based on Tensorflow’s Inception Model & Developing a Django Interface for the given Model and documented the process of executing steps for the users to access this application

RESEARCH PROJECT

Auto Pilot System Using PSO & Kalman filter [\[Source Code\]](#)

Aug 2017 - Dec 2017

Design Oriented project under Prof.Chittaranjan Hota

- Designed a novel PSO enhanced autopilot using the mean squared error cost function between the observed state and the states computed from the Euler-Lagrange equations for each particle and compared the error cost means.
- Optimised brachistochrone path (or) path of least action where the action is time and observed that hybridized algorithm has the least error cost compared to others for 93.8% of the times

TECHNICAL SKILLS

- **Softwares & Frameworks:** Git, Django, GoogleCloud, Spring Boot Framework, Apache Beam, Argo workflow, Kubernetes, Jenkins, Scrapy, SQL & NOSQL Databases, Kafka, Jovo, Helm, Docker, Terraform, Postman, Spacy, Gensim, NLTK, YAML, Spinnaker, Tensorflow, Keras, Liquibase, Open CV
- **Programming Languages:** C/C++, Python, Java, SQL
- **Relevant Courses and Online Certifications:** Machine Learning, Advanced Machine Learning, Associate Google Cloud Engineer, Google Cloud Platform Fundamentals, Google Cloud Platform Big Data and Machine Learning Fundamentals, Elastic Cloud Infrastructure: Scaling and Automation, Essential Cloud Infrastructure: Foundation, Essential Cloud Infrastructure: Core Services from Coursera [\[Coursera Certificates\]](#)

ACHIEVEMENTS AND EXTRA-CURRICULAR ACTIVITIES

- Core value recognition of having **Learning Mind-set** in Endeavour plus project of Lloyds Banking group in the development teams of **500 members**
- Google Certified Associate Cloud Engineer [\[GCP ACE Certificate\]](#)
- Member of BITS-Pilani University team for Cricket and Badminton
- Secured **301 rank in 15000 participants** in Global Round of Codeforces [\[Standings\]](#)
- Secured **4th amongst 150 teams** in the Deep Learning Hackathon conducted by Flipkart: Built a VGG based bounding box classifier
- NSS Foundation, BITS-Pilani (2016-2017): Volunteered in teaching Physics to unprivileged students in a nearby school. Actively participated in blood donation and campus cleaning drives.