Vamsi Krishna Kolluri

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Education

- **Andhra University, College Of Engineering** — Visakhapatnam, India
  Master of Technology in Computer Science and Technology; GPA: 8.07/10 — *Sep. 2013 – Oct. 2015*
- **Koneru Lakshmaiah College of Engineering** — Guntur, India
  Bachelor of Technology in Computer Science and Engineering; GPA: 7.35/10 — *Jul. 2006 – April. 2010*

Programming Skills

- **Languages**: Python, SQL, Shell Scripting
- **Data Engineering**: PySpark, Netteza, Hadoop, Hive, Informatica, Pandas
- **DBMS**: Postgres, Redis
- **Web Frameworks**: Flask
- **Machine Learning**: Tensorflow
- **Developer Tools**: Git, Docker
- **Cloud Platforms** : Azure, AWS

Experience

- **Fission Labs** — Hyderabad, India
  Senior Software Engineer — *June 2019 - Present*
  - **RAMS(Regulatory Affairs Management suite) Emergo - Underwriters Laboratories**:
    - Emergo by UL is a leading regulatory consulting firm specializing in global medical device and IVD compliance and **RAMS** is comprehensive solution is designed to help achieve and maintain regulatory affairs.
    - Working on backend API development using python **Flask** Framework.
    - Using **Azure VM**s for application deployment, and **Key-Valut** for managing the secrets.
    - Written unit test cases using **PyTest**
    - Working on **Registration Tracker** which automate device registrations and tracking.
    - Working on **Regulatory Watch** which helps in customers to keep track of the regulatory changes for their products across the Nations.
  - **Document Annotation and Form Processing Platform - 1901group**:
    - This is a platform for annotating the text/image data and form processing using **OCR/Hand Text Recognition**.
    - Developed the back end annotation Api's using **Flask** framework.
    - Designed and developed **Micro Services** for User Management, Document Management, Annotation Management, Authentication and Text Extraction services.
    - Used **Docker** for containerization of the services and deployed them in **AWS** using **Kubernetes**.
    - Used **Tensorflow** for developing Deep Learning models.
    - Developed machine learning models for hand text extraction using **CNN** and **LSTM** layers .
    - Created the document processing pipelines and corresponding api's for document classification, bounding box detection and text extraction
    - Used **Postgres** as backend database and **Redis** for storing the **JWT** tokens.
    - Used **Apache Airflow** for scheduling/batch processing data pipelines.
  - **Digital Pathology Platform - PathPresenter.ai**:
    - PathPresenter provides a Web based service to connect **Pathologists**, **Radiologists**, **Clinicians** and **Life Science Researchers** to share **Medical Data** and build tools for enhancing **Medical Education**, **Patient Care** and management.
    - Worked on creating python library for processing **Digital Slide** and **Radiology** images using **OpenSlide**.

- ◎ Worked on **Azure batch** Job for processing the digital Images
- ◎ Used **Cron** for triggering the Azure Batch jobs based using AutoScale
- ◎ Used **Shell Scripting** for processing the the tiled images generated using OpenSlide

- **Infosys Ltd** Hyderabad, India
  Senior Systems/Data Engineer *Dec 2015 - May 2019*
  - **Net Promoter Score - Virgin Media**:
    - ◎ Net Promoter Score (NPS) is one of the most important Key Performance Indicators and measures of candidate satisfaction for Virgin Media. Every candidate who attends either a telephone assessment or face-to-face assessment is sent an NPS survey by email in which they are asked to rate from 1 to 10.
    - ◎ Created the Data Pipelines using **Pyspark**, **Hive** and **Informatica** for ingestion and processing the data.
    - ◎ Ingested data from multiple data sources like **HDFS**, **Oracle**, **Netezza** and different file(**CSV, AVRO, Parquet**) formats into the pipeline
    - ◎ Written Hive and Spark SQL queries for data processing across multiple systems
    - ◎ Used **Shell Scripting** for creating the jobs
    - ◎ Scheduled the data pipelines using **Control-M**
  - **MAT Marketing - Virgin Media**:
    - ◎ Virgin Media intend to deliver 5G services to its customers both Consumer and Business customer segments. Virgin Media don't have any specific Network provider on its own, it can lend the network from Mobile Networks like BT/VF and provide services to its customers, to enable 5G services VM is transforming its network from BT to Vodafone. As a part of this program we are enabling the services of Vodafone and 5G services to Virgin Media customers.
    - ◎ Worked extensively on **Spark**, **Informatica** and **Hadoop** with Unix shell scripting for the transformation across many departments
    - ◎ Developed SCD (Slowly Changing Dimension) Type1 and SCD Type2 using **Spark SQL**.
    - ◎ Involved in **Performance Tuning** of Spark and Hadoop jobs by identifying and rectifying performance bottlenecks on long running jobs.
    - ◎ Used **Pandas** to create the final report creations on batch Migrations of customer information on the Network and 5G service.
  - **FMC Reconciliation Solution - Virgin Media**:
    - ◎ Virgin Media has decided to provide Fixed Mobile Convergence (FMC) package to customers, to deliver single bundle which includes all key products (Broadband, TV, Home Phone and Mobile).So, the customer will pay for their cable Media and Mobile services at one place. In order to support this tactical approach, given that there is no integration between Media and Mobile systems, we have performed key changes in both Media (Cable) and Mobile systems.
    - ◎ Developed SCD Type1 and SCD Type2 transformations in **SparkSQL** for batch processing.
    - ◎ Worked on data migration from **Hive** to **Netezza** using **Sqoop** and **NZSql**.
    - ◎ Created the data pipelines for the integration of mobile and media/cabel systems.

Academic Projects

- **Tobacco Leaf Grading using Deep Learning**: Used convolutional neural networks for tobacco leaf classification based on the quality of the leaf, used Torch Lua for model building.
- **Edge Detection in digital Images**: Done a comparative study of different edge detection algorithms and evaluted the performance based on the quality of the results

Course Work

■*Data Structures and Algorithms* ■*Operating Systems* ■*Computer Networks* ■*Theory of Computation* ■*Database Management Systems* ■*Compiler Design* ■*Probability and Statistics* ■*Machine Learning* ■*Distributed Systems* ■*Artificial Intelligence* ■*Network Security* ■*C Programming Language* ■*Data Mining*