SANTOSH KANNAN

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SUMMARY

Software Engineer experienced in designing and building scalable software products on the Big data platform, leading and overseeing associates, and handling client communication.

TECHNICAL SKILLS

- **Languages: Java, SQL**, Python, HTML
- **Concepts:** Data Modelling, Algorithms, Machine Learning fundamentals,
- **Databases:** Oracle, MySQL, AWS Redshift, MongoDB
- **Technologies:** REST API, Apache Hive, Spark, Amazon EC2, Git, S3, Airflow

EDUCATION

Master of Science, Computer Science — **Aug 2019 - May 2021**
University of Florida — GPA: 3.8

Bachelor of Engineering, Information Technology — **Aug 2013 - June 2017**
University of Pune — CGPA: 7.6

WORK EXPERIENCE

Software Engineer, ZS Associates — **July 2017 – May 2019**

Designed and developed cloud-based data analytics software products in **Python, SQL, Spark, and Hadoop** framework for analyzing mid-tier pharma clients' sales and marketing data and assist them in key business decisions.

- **Saved over $200,000 and 100+ hours** of development effort by designing optimized and scalable algorithms for modules such as salesperson incentivization and point in time analytics.
- Re-designed and **reduced operations runtime by 30%** by orchestrating job automation through Airflow scheduler. Successfully tested and deployed the system changes to production servers.
- Awarded **"ZS Impact Recognition Award"** for exceeding client expectation for project delivery and quality by leading 3 associates through planning, task management, code review sessions and overseeing project milestones.

CERTIFICATIONS

- **Udacity** - Machine Learning Engineer Nanodegree
- Software Fundamentals - Microsoft Certified Professional

PROJECTS

Data Analytics Web Dashboard (JavaScript, REST API, NodeJS, Oracle DB)

- Built a full stack web application with responsive data visualisations for monitoring restaurant inspection data. Reduced server response time using **AJAX** calls, which improved overall user experience.
- Reduced data volume by 27% with data normalization techniques to organize data and eliminate redundancy.

Compiler for LUA (Java, JUnit)

- Built a scanner, parser, interpreter and compiler for LUA programming language in Java.
- Analyzed Lua grammar and built **100% fault tolerant** program using JUnit and Error handling.

Sentiment Analysis Web App (PyTorch, SageMaker)

- Developed and deployed a web app on AWS to analyze and classigy user reviews as positive or negative.
- Reduced the **data volume by 30%** by transforming the text data into one dimensional data dictionary arrays.
- Achieved highest **accuracy of 91%** using XGBoost model.

Handwritten Digit Recognition (Python ,NumPy, TensorFlow)

- Developed a Convolutional Neural Network model using tensorflow to classify noisy and high dimensional images of handwritten digits. Achieved an **accuracy of 94.8%**, which was awarded the **"best model"** in class.
- Improved performance by reducing pixel range for images thereby reducing noise, augmenting external data for model generalization and adopting hyperparameter tuning techniques.