SANTOSH KANNAN

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SUMMARY

Software Engineer experienced in designing and building software products on Cloud and Big Data platform, leading and overseeing peers, and handling client communication.

TECHNICAL SKILLS

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

PROJECTS

Personal Website: ksantosh95.github.io (*for additional info and projects*)

Bug Tracker   (Python, Flask, PostgreSQL, Jinja)
- Built and deployed a web app with 4 end user categories for tracking issues during software development.
- Enabled user authorization with **Auth0** and utilized Auth tokens' information for user navigation.
- Incorporated javascript charts for data visualisation, served by database APIs designed in **SQLAlchemy** and SQL.
- Reduced code redundancy by 20% with jinja templates. DEMO: ***bugtracker-stage.herokuapp.com***

Interpreter for Lua Programming Language   (Java, ASM framework, JUnit)
- Implemented a scanner, parser and interpreter in Java to process and return results for a valid Lua program.
- Reduced cascading errors across development phases by following a test driven approach with JUnit.
- Used exception handlers to identify the errors in nested statements and notify the user.

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.

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.

EDUCATION

Master of Science, Computer Science	**Aug 2019 - May 2021**
University of Florida	GPA: 3.85
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