Jayesh Parsnani

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Education

The University of Texas at Arlington, Texas, United States **Aug 2021 - May 2023**
Master of Science in Computer Science *CGPA: 3.8*

Vivekanand Education Society's Institute of Technology, Maharashtra, India **Aug 2017 - June 2021**
Bachelor of Engineering in Information Technology CGPA*: 3.3*

Skills

Languages: Python, Java, C, R, SQL, PHP
Cloud Technology and Databases: AWS, MS MySQL, NoSQL, Oracle, MongoDB, Hadoop.
Frameworks: Spring Boot, Maven, ESAAS, APAAS, Veracode, Bitbucket, Intellij, Flask, Django, IOT, Docker, Postgres, DASH.
Web Technology: HTML-CSS, Bootstrap, Ajax, WebApis, JavaScript, JSON, Nodejs, Vuejs, jQuery, REST API, WebSocket.
Data Science tools: Ab-initio, Pandas, skLearn, ETL processes, Power BI, Tableau.

Professional Experience

Technology Analyst, Barclays **Whippany, United States**
Team HPC *Aug 2023 - April 2023*

- Spearheaded UI enhancements using DASH programming for application, elevating user experience and engagement.
- Engineered a streamlined feedback page utilizing a file system approach, optimizing user feedback collection and analysis.
- Orchestrated the development and implementation of four data pipeline automations, resulting in a substantial reduction of manual labor by
- hundreds of hours monthly, translating to thousands of cost savings for the organization.
- Automated data processing tasks leveraging OpenShift, with YAML file configuration management for enhanced efficiency, scalability.
- Implemented cronjobs for scheduling and automating tasks, contributing to a seamless automation workflow and operational efficiency.
- Enhanced system efficiency by optimizing SQL queries, achieving a remarkable 3-second reduction in processing time.
- Ensured compliance with security standards by updating the application's certificate to CA9.
- Revamped the application using Python's object-oriented principles, augmenting code maintainability and scalability.
- Proficient in comprehensive documentation, ensuring clear and concise records of all processes, procedures, and project implementations.

Team PIXEL *April 2024 - Present*

- Upgraded certificates for all services, ensuring seamless and secure communication across the system.
- Led the ESAAS migration, transferring logs to a new cluster, which improved log visibility and monitoring for the team.
- Identified and resolved security issues within the API, enhancing security and enabling successful Veracode checks during API pipeline runs.
- Contributed to the stability and security of 40 different services, ensuring they operated smoothly across various environments without issues related to logging, certificates, or security.
- Developed and executed comprehensive JUnit tests, ensuring robust code coverage and identifying critical bugs early in the development cycle.
- Utilized SonarQube to monitor code quality, reducing in technical debt and maintaining code compliance with industry standards

Team DATA *April 2024 - Present*

- Initiated the implementation of Agile processes in a newly formed team, establishing a structured and efficient workflow from the ground up.
- Enhanced team visibility by ensuring that all tasks and deadlines were clearly communicated and accessible, fostering a transparent and collaborative work environment.
- Led daily stand-up meetings, promoting consistent communication and swift resolution of any impediments, thereby maintaining project momentum and team alignment.
- Worked closely with the Product Owner to create and prioritize user stories, ensuring that development efforts were directly aligned with business objectives and stakeholder needs.
- Regularly updated JIRA to reflect the current state of projects, providing accurate and up-to-date information to all team members and stakeholders, significantly improving overall team efficiency and productivity.
- Performed data mapping for approximately 60 data tables, ensuring accurate and efficient data integration.
- Designed and developed an ETL process using Ab Initio software.
- Automated email notifications for processed data at specific times, enhancing operational efficiency and communication.

Graduate Research Assistant, The University of Texas at Arlington **Feb 2022 – May 2022**
Research Team *Texas, United States*

- Collaborative work with team of 2 and a Ph.D. professor guided by Dr. ERICK C. JONES on an AI tech project funded by NSF.
- Refined a deep learning object detection model (Single shot detector) that detect pill confirmation with an accuracy between 80 - 95%.
- Blended Technologies - Python, MobilenetV1-SSD for integrating model in mobile devices and LabelImg for labelling the image dataset.
- Published a paper in International Supply Chain Technology Journal detailing the successful development of the deep learning model.

Software Developer (Intern), Trivia Software **Jul 2018 - June 2021**
Maharashtra, India

- Exposed to various Java SE 8 related technologies, implemented Management System Design application using MySQL, Java Hierarchies, and JDBC (Java Database Connectivity).
- Applied Create, Read, Update and Delete (CRUD) operations for employee records over 10000+ employees within organization.
- Integrated a new functionality which trigger a pop-up tune whenever a record was eliminated through the deletion operation.

Projects

Cloud Computing | *Web application to access and analyze earthquake data from Azure Database.* **May 2023**

- Designed an intuitive user interface enabling users to retrieve earthquake data from the last 30 days, perform searches based on specific.

magnitude ranges and locate earthquakes within their designated radius.

- Enhanced application performance by implementing caching mechanisms using Azure Redis, resulting in a significant 50% reduction in response time (from 8 seconds to 4 seconds), ensuring a seamless user experience.
- Deployed the application onto Azure App Services, leveraging the scalability and reliability of cloud infrastructure to ensure seamless access and optimal performance through web browsers.
- Leveraged the powerful capabilities of D3.js for dynamic data visualization, presenting search results in various graphical formats such as Bar charts, Pie charts, and Scatter plots directly within the browser interface.

Machine Learning | Gender Prediction Model using Body Measurements **Dec 2022**

- Created a ML model to predict the gender of an individual considering various physical measurements such as Height, Weight and Age.
- Performed data cleaning, pre-processing on raw dataset utilizing Python's built-in string manipulation and data handling functions.
- Developed a K-Nearest Neighbors (KNN) model, meticulously trained and fine-tuned it to achieve a commendable accuracy rate of 75% on a diverse test set comprising 1,000 samples.
- Implemented thorough evaluation techniques to ensure robust performance and reliability of the model.

Data Analysis and Visualization | Covid-19 Pandemic **Nov 2022**

- Extracted and transformed 300k+ rows of COVID-19 data using SQL and organized the data into Excel files for utilization in Tableau.
- Created an interactive Tableau dashboard with visualizations including global numbers of total cases, total deaths, percentage of population infected by country and continent.
- Demonstrated expertise in data analysis and visualization by leveraging SQL, Excel, Tableau tools to deliver insightful dashboards.

IoT | Smart Parking Solution **Dec 2020**

- Orchestrated a process using IoT-based Raspberry Pi tech for users to park their vehicles efficiently and reducing parking time by 25%.
- Developed an automated license plate recognition system that processed 1000+ images daily, using camera modules and cutting-edge image processing techniques which extract text and store it in a SQL database; reduced manual data entry time by 80% and increased processing speed by 50%.
- Integrated a robust security feature using Twilio API which notifies users via text message in case their vehicle is relocated from the original parking location which is sensed by Ultrasonic sensor whether user car is parked or not.

Web App | Hotel Management System **April 2020**

- Developed a web application for managing a hotel with 100+ rooms, allowing users to book various types of rooms, including Deluxe, Non-Deluxe, and conference rooms, based on their needs.
- Implemented an admin feature that allows the admin to lock or unlock rooms as needed, with access to user information for tracking bookings and offering discounts.
- Designed a loyalty program that provides discounts and special offers to loyal customers who frequently book rooms, helping to drive repeat business and customer satisfaction.

Publications

- Artificial Intelligence Platform on Mobile Devices to Assess Consumption of Pill in Subjects with Alzheimer **ISCTJ**
- Diet Recommendation System for Diabetic Patients **IJERA**