Preetham Sana

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EDUCATION

Master's in Computer Science DEC 2023
Arizona State University, Tempe, Arizona *GPA: 4/4*

Bachelor of Technology in Computer Science and Engineering APR 2020
GITAM University, Visakhapatnam, Andhra Pradesh *GPA: 3.8/4*

PROFESSIONAL EXPERIENCE

Software Engineer OCT 2020 – DEC 2021
Tata Consultancy Services *Hyderabad, TS*
- Automated the management of cloud infrastructure in AWS and Azure by using Terraform, decreased the creation time by 30% and increased the reliability of cloud infrastructure.
- Developed and automated the creation and management of EKS cluster in AWS with Terraform for application deployments.
- Managed AMI/Snapshots/Volumes, along with VPC, Subnets, CPU, Memory, and EBS upgrades and downgrades. Connections between various zones were also built.
- Performed static code analysis with Sonarqube to generate detailed report of bugs, code smells, vulnerabilities, code duplications and provided a clean code.
- Integrated Sonarqube with Gitlab CI/CD pipeline for dynamic analysis of code quality.

Software Engineer Intern MAY 2019 – JUN 2019
Grepthor Software Solutions Pvt Ltd *Hyderabad, TS*
- Developed an application based on sentimental analysis to define the polarity of the public opinions and designed review processing system to classify the reviews as good or bad.
- Designed webpages for the users with **Django** framework to provide their reviews, and see how they are classified.
- Used **NLTK** and **Scikit-learn** library to pre-process the data and train the model and **Naïve Bayes** algorithm is used to find the probability to classify the data.
- Provided users an interface to contribute their reviews and they will be processed as a good review or bad review based on the keywords.

PROJECTS

Geospatial Data Processing Engine | *Python, Apache Spark, Hadoop, Scala, Mongo DB* JAN 2022 – APR 2022
- Analyzed NYC Taxi Trip spatio-temporal data and applied spatial statistics in order to identify statistically significant spatial hot spots areas using Apache spark.
- Implemented a model to find the business activities based on the locations and cities using spatial and textual searching on MongoDB using the PyMongo interface.

Epidermis Detection System | *PyCharm, Python* JUNE 2021 – AUGUST 2021
- Built an two-dimensional map of a problem space with Self Organizing Map(SOM) algorithm and trained the model to learn about the skin and non-skin colored pixels.
- Detected the skin in an image or video by using NumPy, argparse, cv2, and imutils modules and differentiated the skin from other arbitrary objects in the image.

Gesture Control using OpenCV | *PyCharm, OpenCV, Python* JAN 2020 – APR 2020
- Collabrated as a team of 4 people to enhance the user experience when interacting with a PC, build and create a system that can recognize hand motions using **TensorFlow** and **Haar cascade**.
- Improved the feature selection using the Boosting and **AdaBoost** algorithms

TECHNICAL SKILLS

Programming Languages: C, C++, Java, Python, SQL, HTML 5, CSS 3, JavaScript, XML
Frameworks: React.js, Node.js, Django
Tools, Databases: Git, GitLab, Docker, VS Code, MySql, Mongo DB
Operating Systems: Windows, Linux/Unix, macOS
Cloud Resources: AWS EC2, S3, Microsoft Azure
Courses: Data Structures and Algorithms, Mobile Computing, Optimization Techniques, Agile Methodologies, Distributed Systems, Data Processing at Scale, Cloud Computing