Gangadhar DN

Portfolio E-mail GitHub LinkedIn

Education

Presidency University — Bangalore, India
B-Tech, Computer Science and Engineering (CSE) — 2017-2021

Experience

Machine Learning Intern – Aryabhata Technologies (Startup) **Oct 2020 – March 2021**

- Research and implementation of Neural network methods for plant segmentation and detection.
- Utilizing OpenCV technique to perform object, edge detection, & image recognition.
- Worked with GANs, Convolutional layers, with multiple hidden layers to generate more data, while having small dataset, using TensorFlow-Keras and PyTorch Library.
- Developing an internal tool to fetch (extract) image data based on user query, using scraping technology like Scrapy, Selenium.
- Developed an internal tool using Keras library for Data Augmentation, impacted the team members to have much large data to process and work with.
- Worked as a Product Developer.
- Acquired experience in technologies such as Selenium, Data Wrangling/Cleaning, PyTorch3D, GANs, OpenCV, Bitbucket.

Web Developer – Cubic-code **June 2019 – July 2019**

- Worked with the development team in performing design and coding.
- Acquired experience with various ways to design and develop web pages.
- Developed designs with coding as per the industry standards.
- Deployed a Website – [**Website**]

Skills

- **Programming Languages**: Python, C, C++, Java, JavaScript
- **Frameworks/Libraries:** TensorFlow, PyTorch, Keras, Flask, ReactJS, JDBC
- **Cloud:** AWS, GCP, IBM Cloud, Azure
- **Database Systems:** MongoDB, MySQL
- **Technologies/Tools**: Git, GitHub, OpenCV, Selenium, Scrapy, Tableau, VS Code, Docker, Kubernetes
- **Natural Languages**: English • Telugu • Kannada • Hindi
- **Interests**: Data Science • Deep Learning • Cloud Computing • Web Development

Projects

- **Human Protein Image Classification**
  - Using Deep Neural Network, Classifying mixed patterns of proteins in microscopic images.
  - The need is greater than ever for automating biomedical image analysis to accelerate the understanding of human cells and disease.
  - Obtained an overall accuracy of 78%.
  - Got Top-10% in Kaggle Competition [**Kaggle**]

- **Face & Gender Recognition using ML and Computer vision in Flask – [GitHub]**
  - Utilized OpenCV techniques to perform image cropping, detecting face.
  - Using Principle Component Analysis(PCA) to extract Features with Eigen values of images, after tuning - the model got an accuracy of 86%.
  - Performing Data cleaning, EDA, Preprocessing, Training & Tuning the ML model.
  - Created and Deployed Flask app by integrating with my Trained ML model.
  - This app can be used as base to create more advanced like face emotion detection & other.

- **Human pose Estimation** – [GitHub]
  - Using Computer Vision library, performing Pose estimation on Human
  - Locates different position of human like right hand elbow, eyes, nose etc.
  - Real-time pose estimation using OpenCV

- **Machine Learning for Twitter API Map Visualization & Sentiment Analysis** - [GitHub]
  - Real-time tweets from Twitter by bot using automation with Python code.
  - Visualization of plot for user's tweets.
  - Sentiment Analysis was performed on processed tweets.
  - Visualizing the Twitter Data – Map Visualization of mood around the globe

- **Bhuvan Probability** – [Project]
  - Published a Python PyPi package on pypi.org
  - Computes the probability for given input

- **Deep Water Boat House** - [Link]
  - A Website for booking Boat House in Alleppey
  - A Dynamic website to switch over multiple pages

- **Other Selected Projects on GitHub – [Link]**

Competitions, Certificates and Activities

- Kaggle Competition – "**Zero to GANs Human Protein Classification**" – Top 10%.
- Attended multiple **Machine Learning** based, **TensorFlow** events and conferences including Google Developers "**DevFest**" in Bangalore.
- Participated in **GitHub <HACK ON/>** a Pan India Online Hackathon.
- **Global Green Revolution** Certification by **ICCE** and **United Nations**
- **Summer Analytics** a **Data Science** boot camp course (250+ hours) organized by **Consulting & Analytics club, IIT Guwahati.**
- Successfully completed **"IBM Data Science Professional Certificate"** course
- Completed five-course specialization **"Architecting with Google Compute Engine"** by **Google Cloud** on Coursera.
- Completed **"AI from the Data Center to the Edge"** – Using Intel Architecture by **Intel-AI**
- Completed **"Joy of Computing in Python"** and **"Social Networks"** course by NPTEL from **IIT Madras** and **IIT Ropar**.
- Completed **"Open VINO Fundamental"** course on **Intel IoT Edge AI** scholarship by Udacity.
- **Google Action Developer**, **Alexa Skill Developer** – Created & Deployed the Chatbots in **Google Assistant** and **Amazon Alexa**.