RAJITHA BHAVANI KANTHETI

rkanthe@clemson.edu | https://www.linkedin.com/in/rajitha-bhavani-kantheti | https://rajitha123k.github.io/personal-portfolio/
+1 864-280-5923

TECHNICAL SKILLS

- **Programming Languages:** Python, Java, C++, Objective-C, C#, HTML/CSS, JavaScript, Node.js, R
- **Database:** MongoDb, Firebase, PostgreSQL, MYSQL
- **Tools:** Atlassian Jira, Visual Studio, GIT, Mercurial, IntelliJ, Colab
- **AI and Machine Learning:** NLP, ASR, TTS, Conversational AI, Dialogue,

PUBLICATIONS AND CERTIFICATIONS

- Kantheti, Rajitha Bhavani. "Smart Watch to Detect Levels of Vitamin D." International Research Journal of Engineering and Technology (IRJET) , vol. 07, no. 05, May 2020, doi:https://irjet.net/archives/V7/i5/IRJET-V7I5936.pdf.
- IBM Data Science Professional Certification
- Generative Adversarial Networks (GANs) Specialization by deeplearning.ai
- Samsung AI Certification
- Microsoft Azure AI Fundamentals Certfication
- Google Cloud Machine Learning Engineer Certification

EXPERIENCE

Technical Solutions Specialist **Cisco Systems Inc**
Technology- Python, Node.js, MongoDB, Atlassian Jira, Github *June 2021 to Present*

Working in an Agile based environment to develop highly scalable, effecient and reusable PoCs and deliver it to the customer. Continually developing on Webex APIs and SDKs.

- Created **Webex Assistant skills(AI-powered virtual assistant)**, which on voice command displays:
  - latest news summaries built using GPT4
  - weather in a city built using weather APIs
  - allows to users to login and view their calendar meetings in google and outlook built using Google and Microsoft APIs

  and deployed it using flask and docker on AWS, which generated a revenue of 200K+
- Created **Sentiment analysis** on top of Webex Contact Center using GPT3 to understand the feedback, which is now used by 20+ customer companies.
- Identified significant opportunities to automate and optimize clinical tasks using Machine learning and Natural language processing **Virtual Health Assistant bot** which helps in scheduling virtual appointments with healthcare professionals.
- Created **war room assistant bot**, which on emergency incidents adds all the members to a Webex space and notifies all the members by calling, SMS and email. This PoC attracted 10+ customers and helped in generating revenue of 15M+
- Created many other NLP based bots like **HR Bot** which replies which general and HR queries using OpenAI and workday APIs, **Engagement Bot** to engage our team with sales teams to address customer requests. Leveraged Generative AI and various Large Language Models (LLMs) to create a system providing insightful, narrative responses to a broad array of marketing metrics queries.
- Received Impact Achiever award in the year 2022.

Software Development Intern **Avalara**
Technology- Python, Google Colab, NLP, CNN, PyTorch, Atlassian Jira, GitLab *Jan 2021 to April 2021*

Implemented signature detection system on identity documents using YOLO algorithm. Evaluating and improving the blind set with an initial expectation of 80% of precision and recall.

Graduate Research Assistant - Autonomous f1tenth race car project **Clemson University - ECE Department**
Technology- Python, ROS, Google Coral, CNN, GAN, Tensor Flow, SLAM *Oct 2019 to Jan 2021*

- Building autonomous race cars considering power efficiency and performance on GPUs like Google coral and Nvidia Jetson.
- Implementing data augmentation techniques like pix2pix, DCGAN, cycleGAN and WGAN on CNN classification algorithm using German Traffic Sign Recognition Benchmark in tensorflow, resulting in improvement of classification accuracy from 95% to 99% and production of unbiased traffic sign dataset.

Member Technical Staff (Full Stack Developer) **Zoho Corporation Pvt Ltd**
Technology- Java, EmberJS, Postgres, Elasticsearch, Agile, REST APIs, GIT, Mercurial *June 2018 to June 2019*

- Designed threat intelligence feature on the product Event Log Analyser, which lets the user receive instant alerts when malicious IP sources interact with their network, using distributed file systems to store STIX/TAXII and AlienVault OTX, which helped the product generate 1.5 million revenue that year.
- Worked on the product Cloud Security Plus on collecting, monitoring and analyzing log data to provide insights on activity happening in the AWS, salesforce environments, developed using Agile Scrum methodologies.

EDUCATION

Clemson University **GPA: 3.80/4.00**

Master Of Science, Computer Engineering (Intelligent Systems) *May 2021*

Thesis: "Measuring the efficiency of classification algorithm on traffic sign dataset", Advisor: Dr. Sally A. Mckee

Courses: Artificial Neural Networks, Computer Vision, Statistics using R programming, Analysis of Tracking Systems, Data Analytics

Jawaharlal Nehru Technological University **GPA: 3.66/4.00**

Bachelor Of Science, Computer Science and Engineering *May 2018*

Courses: Database Management Systems, Design and Analysis of Algorithms, Unified Modeling Language, Web Development, Object Oriented Programming, Cloud Computing, Distributed Computing, Operating Systems

PROJECTS

BBC News Text Summarizer

Technology- Python, Keras, Transformers, ROUGE, Tensorflow

- Developed a text summarizer using transformers, leveraging advanced natural language processing techniques to condense lengthy texts into concise summaries.
- Evaluated using ROUGE techniques.
- Looking into improving it using models like BERT and GPT.
- Blog- https://medium.com/p/6ff421847f8864b4-e20f1feed9a

Face Recognition using CNN

Technology- Python, Keras, NumPy, Pandas, Tensorflow

Implemented triplet loss function to develop a high accuracy face recognition model. Made sure the anchor image is much closer to the positive image than the negative image to improve accuracy.

Car Detection using YOLO algorithm

Technology- Python, Keras, NumPy, Pandas, Tensorflow

Implemented the highly efficient "You Only Look Once (YOLO) algorithm" to detect cars and their corresponding coordinates.

AEP Classification using Multi Layer Feed Forward ANNs

Technology- Python, Keras, NumPy, Pandas, Tensorflow

Using GDR equations as the basis, I developed a Multi Layer Feed Forward ANNs on MUSC's EEG waveform dataset. Tuning different values of bias and momentum, I obtained 95% accuracy.

Stock market trend prediction using Machine Learning

Technology- Python, Keras, Sklearn

This project seeks to analyze various Machine Learning algorithms that predict the trend of stock market closing prices based on past historical data.

Smart Watch Predicting D Vitamin levels

Technology- IOT, NodeMCU, MIT app inventor

Smart watch that determines how much and at what time a person requires sun in order to obtain enough amounts of D Vitamin.