Sai Prathik Mandyala

Tempe, AZ 85282 | smandyal@asu.edu | (602) 727-8746 | www.linkedin.com/in/mandyala | https://github.com/smandyal

EDUCATION

Arizona State University **Aug 2021 – Dec 2022 (expected)**
Master's in Computer Engineering *Tempe, USA*

- **Coursework:** Deep Learning, Natural Language Processing, Data Intensive Machine Learning, Mobile Computing, Foundations of Algorithms, Probability and Random Processes

Manipal Institute of Technology **Aug 2012 - May 2016**
Bachelor's in Electronics and Communication Engineering *Manipal, India*

TECHNICAL SKILLS

- **Languages and Frameworks:** Python, Java, MATLAB
- **Data Science Libraries:** Pandas, NumPy, OpenCV, Matplotlib, Seaborn, scikit-learn, TensorFlow, SciPy, Keras
- **Tools and Frameworks:** Android Studio, GitHub, Linux, LaTeX, Jupyter Notebook, Eclipse, PyCharm, Visual Code Studio
- **Databases:** Flask, MySQL

ACADEMIC PROJECTS

Biometric Liveness Detection **Dec 2021**

- Built an Android application to detect the authenticity of a Brain wave signature from Brain wave data garbled with attack vector data.
- Performed Data Cleaning and feature extraction on a data set containing 2000 signals.
- Trained 5 machine learning models like Multilayer Perceptron, SVM, CNN, Random Forest and K-Nearest Neighbors to detect attack vectors mixed with Brain wave signals achieved an Ensemble accuracy of 93%

Abnormality Detection from Chest X-Ray Imaging using VGG and DenseNet Deep Learning Models **Dec 2021**

- Built a VGG and DenseNet deep learning model capable of analyzing X-ray imaging and marking the abnormal areas in the images, achieving an accuracy of 80 percent.
- Performed Data analysis on patient data of more than 30000 subjects.

Android application to collect COVID-19 symptoms data and Biometric markers **Oct 2021**

- Built an Android application that could capture data of severity 9 COVID-19 symptoms and assess the risk of infection.
- Built-in App feature capture Heart Rate data accurate within 8 BPM of baseline and Respiratory rate up to 80 percent accuracy

Heart Risk Prediction using patient data **Sep 2021**

- Built an Ensemble ML prediction model using Logistic regression, Multi-Layer Perceptron, and Random Forest methods to analyze patient data and predict the risk of Heart related ailments on patient data of more than 400 subjects.

ACADEMIC PAPER'S PUBLISHED

Remote Location and Health Monitoring Device with Network Independent GPS **Mar 2017**

- Built an embedded electronic device aimed at monitoring the location and vitals of hikers in the Western Ghats of India.
- Chenchu Sai Babu, C. P., Srinivasan, C. R., Prathik Mandyala S., Kalluri, B., & Srividya, R. (2016). Remote location and health monitoring device with network independent GPS. International Journal of Control Theory and Applications, 9(39), 143-150.

TECHNICAL EXPERIENCE

Cybersecurity Consultant – System's Engineer **Mar 2017 — Nov 2020**
TATA Consultancy Services Ltd. *Hyderabad, India*

- Responsible for the Risk Assessments and Vulnerability management of a Fortune 500 company.
- Managed Cybersecurity and compliance requirements of over 2000 Windows and Unix servers
- Collaborated with teams spanning over multiple technical domains and supported PAM infrastructure to manage over 150000 priority accounts.