Prabha Sahiti Mandaleeka

Email: sahitiprabha@gmail.com — **Phone**: +91-7550173072 — **Website** — **LinkedIn**: Prabha Sahiti

EDUCATION

Indian Institute of Information Technology Design and Manufacturing, Kancheepuram
Bachelor of Technology **July 2016 - May 2020**

- **Major**: Electronics and Communication Engineering with a specialization in Design and Manufacturing
- **CGPA - 8.94/10**
- Relevant Courses: Advanced Digital Signal Processing, Embedded Systems Design, Signals and Systems, Control Systems, Systems Thinking for Design, Designing Intelligent Systems
- Workshops and Certifications: AI for Medical Diagnosis(Coursera), AI for Medical Prognosis(Coursera), Fundamentals of Neuroimaging(Coursera), Biomedical Image Analysis (Datacamp), Digital Image Processing (NPTEL), Biomimicry Workshop (Biomimicry India Network), Electronic Systems for Cancer Diagnosis (NPTEL), Introduction to Cognitive Psychology (NPTEL).

Sri Chaitanya Junior College
Senior Secondary **July 2015 - May 2016**

- **Percentage**: 97.7% with the Telangana State Board for Intermediate Education

PUBLICATIONS

Reliability of Smart Wearable Device PHEEZEE Versus Other Traditional Devices in a Podiatric Setting: A Comparative Study **September, 2019**
Haaris Mohsin Moosa, Mythreyi Kondapi, Prabha Sahiti Mandaleeka, Susurla V S Suresh

Abstract in proceedings of the **IFASCON 2019**, *32nd Annual Conference of the Indian Foot and Ankle Society.*

INTERNSHIP EXPERIENCE

Project Intern **January 2020 - Present**
Mentor**: Dr Karthic Narayanan* ***MaDeIT Innovation Foundation

- Worked on the physiological modelling of athletes.
- Designed and developed the statistical inferencing and the predictive model to monitor athlete performance.

Artificial Intelligence Engineering Intern **October 2019 - December 2019**
Mentor**: Murugesh SK, CEO* ***Scermlind Healthcare

- Worked on Heart Rate Variability and Activity data for their device, 'Urufit'.
- Designed the preprocessing engine for the Machine Learning algorithm to evaluate athlete fitness.
- Designed the algorithm to monitor stress and recovery in athletes.

Systems Engineering Intern **May 2019 - October 2019**
Mentor**: Susurla V S Suresh, CEO & Managing Director* ***Startoon Labs

- Worked on the Signal Preprocessing, Parameter extraction and analysis of the Electromyographic (EMG) Signal for their device, 'Pheezee'.
- Improved the accuracy of the IMU algorithms for the foot and ankle, at the firmware end on Segger Embedded Studio.
- Designed the accuracy testing procedure and conducted the testing on healthy subjects.

- Performed market research to determine the parameters for data analysis.

Startup Sandbox Program **December 2018**
Mentor**: Dr Sudhir Varadarajan, CEO* ***MaDeIT Innovation Foundation

- The Startup Sandbox Program, organized by MaDeIT, in collaboration with Entrepreneurship Development Institute of India (EDII), was a three-week Entrepreneurial Bootcamp.
- My team worked on technological interventions for adherence to the tuberculosis drug regimen.
- Performed market analysis, came up with product design, proof of concept and business plan for our product - 'Konseous'.

ACADEMIC PROJECTS

Brain Tumor Auto-Segmentation **January 2020 - May 2020**

- Implemented an algorithm in Python to auto-segment neural MRI images using a 3D U-Net.

Breast Cancer Detection **November 2019 - December 2019**

- Implemented an algorithm in Python on the MIAS Database to detect the probability of Breast Cancer using a Convolutional Neural Network.

ECG Signal Enhancement using an Adaptive Kalman Filter **January 2019 - May 2019**

- Implemented an algorithm in MATLAB to enhance the ECG Signal extracted from surface electrodes embedded in smart textiles.

Chronic Wound Monitoring System **January 2019 - May 2019**

- The device aims at improving the healing time of chronic wounds by monitoring surface parameters like moisture and temperature of the wound area.
- Worked on the embedded system design for the AT Tiny.
- Designed a flexible, fractal based, biocompatible sensor to detect moisture in the wound area.

TECHNICAL SKILLS

Languages	Python, MATLAB, C, Embedded C
Libraries	ImageIO, Keras, Scikit-Learn, Tensorflow, Pytorch, OpenCV
Tools	Arduino, Raspberry Pi, Segger Embedded Studio, Signal Processing, Image Processing, Machine Learning, Deep Learning