

# BHAGYASREE K S

Biomedical Engineer/Software Engineer

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## PROFESSIONAL SUMMARY

- 3 year experience in Research and implementation of signal processing and evaluation techniques for ECG analysis & arrhythmia detection in **PYTHON**
- Participated in complete cardiac monitor software development life cycle of a successfully launched product.
- Familiar with basics of **WEB DEVELOPMENT**
- Very much Passionate about understanding and implementing various **MACHINE LEARNING** and **DEEP LEARNING ALGORITHMS**.

## ACADEMIC PROFILE

COURSE	INSTITUTION	BOARD	AGGREGATE	YEAR
B. Tech Electronics and Biomedical Engineering	Govt. Model Engineering College, Thrikkakara	CUSAT	7.53	2018
Class XII	St. Aloysius HSS, Elthuruth	STATE	95.25%	2014
Class X	SNGS High school, Karamuck	STATE	95%	2012

## PROFESSIONAL EXPERIENCE

Biomedical Engineer/Software Engineer

Waferchips Techno solutions Pvt Ltd in Technopark, Kollam, Kerala (Aug 2018 - Aug 2021)

Project: ECG monitoring device

- The device is a single lead Live ECG monitoring device which is used for long term continuous ECG monitoring. It can replace high cost Holter monitor which is currently used in hospitals.

Roles and Responsibility:

- As a Software Engineer, I'm in charge of signal processing and post processing of medical data which involves software analysis, planning, implementation, and verification.
- Work collaboratively with the AI team and application development engineers in software development phases.
- Knowledge in ECG data analysis and processing techniques.
- Developed and implemented algorithms in python for ECG signal processing and automated detection of various arrhythmia conditions using algorithm and AI.
- Developed Backend module using python, SQL, Mongo DB for a web application, which is used by Doctors and ECG analysts for verification of Patient Data
- Knowledge in Machine learning and Deep learning Frameworks. Also involved in creation and collection of datasets for AI training and generate models.
- Knowledge in testing web-based medical software
- Experienced in working in agile environment with task estimation and sprint planning.
- Develop and propose improvements and new areas for research supporting current projects by conducting meetings with various product users and doctors.
- Design and implementation of Final Reports of analyzed ECG datasets.
- Implementing various visualizing plots using libraries like matplotlib and plotly.
- Detailed knowledge in cardiac arrhythmias and its detection from ECG signals.
- Documentation of user manual for medical software.
- Handling crisis situations by effective communication and coordination with various teams.

## TECHNICAL SKILLS

- **Python** Programming language
- Expertise in handling database like **SQL, CSV & MONGO DB**
- **ECG Signal Processing** techniques
- Familiar with the usage of various python libraries like **NumPy, Pandas & SciPy** and Graphing libraries like **Matplotlib** and **Plotly**.
- Basic knowledge on various **Machine Learning** and **Deep learning** algorithms using Libraries like **Tensor Flow** and **Sklearn**.
- **Web development** using python framework- **DJANGO**
- Basic Knowledge on **html, css, bootstrap, javascript**
- **OS:** windows, Linux

## PERSONAL SKILLS

- I'm a self-motivated & goal-oriented person with Good Teamwork ethics and able to master new skills quickly.
- Excellent written/verbal communication skills with fluency in English & Malayalam.
- Dedicated and capable of understanding engineering problems and proposing practical solutions.

## PERSONAL DETAILS

- Name: Bhagyasree K S
- Date of birth: 21-08-1996
- Gender: Female
- Marital status: Married
- Location: Thrissur, Kerala
- Language Known: Malayalam, English

## DECLARATION

I hereby declare that the above particulars furnished by me are true to the best of my knowledge and belief.

BHAGYASREE K S