

# Shamal Telkar

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## Career Aspiration

To secure a challenging position where I can efficiently contribute my skills as software professional, possessing competent Technical and versatile skills and be an invaluable asset to the organization.

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- **Ph.D Registered & Ongoing** - Part time for the academic year 2018-19 at Visveswaraya Technological University (VTU), Belgaum.
  - **Post Graduate in Computer Science Engineering** from Poojya Doddappa Appa College of Engineering, Kalaburgi.
  - **Worked as Assistant Professor in APPA Institute of Engineering & Technology, Kalaburgi.**
  - **Worked as Assistant Professor in Sridevi Women's Engineering College, Hyderabad.**
  - **Presently working as Assistant Professor in Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad.**

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- **Institute** : **Appa Institute of Engineering & Technology, Gulbarga 2008-2010**  
**Designation** : Asst. Professor  
**Period of Work** : From October 2008 to May 2010 (**1 Year 7 Months**)  
**Subjects Handled** : Web Programming, Software Testing  
**Laboratory** : C Programming, web Programming
  - **Institute** : **Sridevi Women's Engineering College, Hyderabad.**  
**Designation** : Assistant Professor  
**Period of Work** : From 24-06-2015 to 02-11-2021 (**6 Years 5 Months**)  
**Subjects Handled** : Data Structures using C/C++, Design and Analysis of Algorithm, Data Mining and Data Warehousing, Web Technologies, Information Retrieval System, Database Management system, Introduction to Analytics.  
**Laboratory** : Data Structures Lab. Data Mining Lab, Database Management system Lab

- **Institute** : **Gokaraju Rangaraju Institute of Engineering and Technology,Hvd.**
- Designation** : Assistant Professor
- Period of Work** : From 01-12-2022 to till date
- Laboratory** : V B u s i n g C # . N E T L a b

## **EDUCATION**

- **Bachelor of Engineering in Information Science**

Poojya Doddaappa Appa College of Engineering, Gulbarga.

2004-2008, Secured **66% Aggregate**.

- **Post-Graduation M.Tech Computer Science**

Poojya Doddaappa Appa College of Engineering, Gulbarga.

2012-2014, Secured **9.39 G.P.A.**

- **Ph.D. Visveswaraya Technological University - Belgaum, Karnataka (2018-19 to Present) – Ongoing**

Research Centre: Poojya Doddaappa Appa College of Engineering, Gulbarga.


## **TECHNICAL SKILLS**

<b>Languages</b>	: C, C++,Data Structures, JAVA,C#.NET.
<b>Database</b>	: SQL, Oracle.
<b>Web Technologies</b>	: Servlets, JSP
<b>Scripting Languages</b>	: HTML, XML, Java Scripts, PHP
<b>Web Servers</b>	: 2.0, Tomcat 5.0
<b>Operating Systems</b>	: Windows 9X/2000/XP, LINUX, UNIX.

## **PROJECTS**

- Logic Design, Micro Processor, ADA, Data Structures with C, JAVA, Web Programming.
- DBMS, Operating System, System Software, Data Communication, Software Engineering, Software Testing.
- UNIX, Network Programming.

- Achieved an Appreciation note as “Extraordinary Teacher” on teacher’s Day 2020 by Sridevi Women’s Engineering College, Hyderabad.
- In Academics worked at department level as NBA Co-ordinator, NAAC Criteria 1,3 Coordinator, JNTUH Coordinator, Attendance coordinator, Exam-Branch coordinator, Project coordinator.
- Have completed the Cisco Networking Academy course on “Introduction to IoT”, in march-2021.
- Participated in Two-week online Training Programme on “CYBER SECURITY TOOLS”, organized by H.K.E Society’s Poojya Doddappa Appa College of Engineering, Kalaburagi, under TEQIP-III, MHRD Gov. of India, held between 19<sup>th</sup> to 29<sup>th</sup> December 2020.
- Organized, participated & completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "Internet of Things (IoT)" from 2020-12-7 to 2020-12-11 at Sridevi Women’s Engineering College.
- Attended the course at IIRS outreach network Centre, online course on “Geospatial Inputs for Enabling Master Plan Formulation”. The course was conducted by Indian Institute of Remote Sensing (IIRS), during 27-07-2020 to 31-07-2020 . Sridevi Women's Engineering College
- Participated in online course on “Remote Sensing and Digital Image Analysis” conducted by Indian Institute of Remote Sensing (IIRS), ISRO, Dehradun during 17-08-2020 to 11-09-2020 (Total course duration = 25 hours and 30 minutes).
- Participated in a Two-Day Seminar on “Block Chain Technology & DevOps” at Malla Reddy College of Engineering and Technology from 30<sup>th</sup> Nov 2018 to 1<sup>st</sup> Dec 2018, organized by department of IT
- Participated in One-week STTP on “IOT using NodeMCU” conducted by in Entirety Innovations from 2<sup>nd</sup> July 2018 to 7<sup>th</sup> July 2018 at in Entirety Innovations Facility, Hyderabad.
- Participated in One week Faculty Development Program on “IoT Using NodeMCU” organized by in Entirety Innovations from 11<sup>th</sup> Dec 2017 to 16<sup>th</sup> Dec 2017 in Sridevi Women’s Engineering College, Hyderabad
- Participated in AICTE Sponsored, A Two-Week Faculty Development Program on “Research Trends in Digital Image and Video Processing”, Organized by Department of Electronics & Communication Engineering, MGIT Hyderabad
- Participated in One Week Faculty Development Program on Open-Source Software Through Spoken tutorials, IIT Bombay, organized by Department of Information Technology, BVRIT Hyderabad college of Engineering for Women, from 4<sup>th</sup> Nov 2016 to 10<sup>th</sup> Nov 2016.
- Participated in Three-Day Workshop on “Web Programming” from 25<sup>th</sup> June 2009 to 27<sup>th</sup> June 2009, organized by Department of Computer Science And Engineering, BIET, Devanagari.

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- Published paper on Enhanced AlexNet for Detecting the Myocardial Infarction –An Efficient Approach in International Journal of Image and Graphics IJIG-Scopus ISSN: 1793-6756 Publisher: world Scientific H-Index:24 March 2024
  - Published paper on Design and Development of Hybrid Optimization-Enabled Deep Learning Model for Myocardial Infarction in International Journal of Socio-technology and Knowledge Development (IJSKD)-IGI Global, Scopus Volume: 14, Issue: 1, ISSN: 1941-6253
  - Has participated and presented a paper titled “Iiwscoa-Based Dcnn: Improved Invasive Weed Sine Cosine Optimization Algorithm for Early Detection of Myocardial Infarction using Deep Convolution Neural Network” in (17-18 Sept) SCI-2021 held at Vasavi College of Engineering (Autonomous), Hyderabad, India.
  - Published paper on, “Real-Time Stream Data Analysis Framework for forecasting the Marine Congestion and Crash Prevention of Ships”, International Journal of Future Generation Communication and Networking Vol. 13, No. 4, (2020), pp. 2540–2557
  - Published a Paper on, “Novel Decentralized Systems for Data Publishing by Trusty URI Links”, International Journal of Computer Science(IJCS), SK Research Group of Companies(SKRGCC), Scholarly Peer Reviewed Research Journals, Volume 4, Issue 2, No 6, 2016, Reference ID: IJCS-141, ISSN:2348-6600
  - Published a Paper on, “A Two Level Knowledge Discovery Using Content and Query Values”, International Journal of Scientific Engineering and Technology Research(IJSETR), Volume 05,ISSUE 05, September 2016, ISSN: 2319-8885
  - Presented a Paper entitled “A Real Time Intelligent Alarm system On Driver Fatigue Based On Video Sequence” in the International Conference on Computational Vision & Robotics (ICCV-2014) held at IIMT RESEARCH NETWORK, Bhubaneswar, Odisha, on 10<sup>th</sup> August 2014.
  - Participated, in “ALL KARNATAKA STUDENTS TECHNICAL PAPER CONTEST” conducted by IETE Bangalore Centre on 28<sup>th</sup> October 2007.

## **TITLE : “ANALYSIS FOR EARLY DETECTION OF MYOCARDIAL INFARCTION USING DEEP LEARNING TECHNIQUES”**

**ABSTRACT:** MI is usually caused by reduced or decreased blood flow in a coronary artery due to rupture of an atherosclerotic plaque and subsequent occlusion of the artery by a thrombus. Myocardial infarction is a harmful CVD, and it is one of the most dangerous causes of death all over the world. Every year, nearly 8 million deaths occur globally, around 350 deaths occur every one hour in India due to CVD. If the extent of the myocardial infarction is large, the affected poorly contracting wall segments can introduce increased mechanical stress to the heart, resulting in morphological and conformational alterations in response, i.e., left ventricular remodelling, which results in inefficient pump functioning and contributes to heart failure. The progression of myocardial infarction mainly happens in three major phases such as the primary phase which is termed as the myocardial ischemia, the acute phase, and finally, the necrosis phase, resulting in the death of heart muscle cells or heart attack. Major risk factors associated with myocardial infarction are high cholesterol, diabetes, high blood pressure, physical inactivity, obesity, unhealthy diets, overwork, excessive drinking and smoking. Symptoms of acute myocardial infarction involve breaking into cold sweats, chest pain, shortness of breath, dizziness, nausea, as well as discomfort that may radiate to the arm, shoulder, and neck. Which further can cause myocardial necrosis by acute and sustained ischemia and hypoxia of coronary artery, leading to permanent damage of heart muscle. Therefore, early detection and prevention of myocardial infarction are of great significance, which can ensure the life safety of patients. Electrocardiogram (ECG) is the most commonly used detection tool because of its convenience, non-invasiveness and low price, which shows P wave, QRS Complex and T wave. It is spontaneous to detect myocardial infarction using 12 leads ECG with deep learning techniques. Cardiologists and medical practitioners can diagnose myocardial infarction based on the changes in the ECG, such as inverted T wave, deviation of ST segment or pathological Q wave. ECG changes – ST segment and T wave changes, also show tachycardia, bradycardia, or dysrhythmias. The myocardial infarction classification will be performed using Deep Convolutional Neural Network, which will be trained using the proposed optimization algorithm. Most of the literatures were based on the procedure including the feature extraction, feature dimensionality and classification. Further, time domain analysis, frequency domain analysis, entropy, optimization algorithm are employed to extract the

representative features. K Nearest Neighbors, support vector machine, Decision Tree, Naive Bayes, Back Propagation neural network and other machine learning techniques have been widely adopted as the classification methods. In the past few years, deep learning methods, including Convolutional Neural Networks (CNN), Recurrent Neural Networks (RNN), Restricted Boltzman Machines (RBM) and Auto Encoder (AE), are applied to the health care domain based on physiological signals, such as ECG, EEG.

**Date of Birth** : 03 May 1986

**Current Address** : H.No. 6-8/2, Chandanagar,  
Hyderabad – 500050

**Permanent Address** : H.No. 6-8/2, Chandanagar,  
Hyderabad – 500050

**Marital Status** : Married

**Linguistic Abilities** : English, Hindi, Marathi, Kannada, and Telugu

**Nationality** : Indian

**Religion** : Marathi

I hereby declare that the Information furnished above is true to the best of my knowledge.

Place: Hyderabad  
**Shamal Telkar**