

Subject: Request for Anonymized Patient Data for Research on Early Detection of Heart Disease

Dear Sir/Madam,

We hope this letter finds you well. We are a research team from the Department of Computer Science and Engineering at **Bangladesh University of Engineering and Technology (BUET)**, currently engaged in a project on **early detection of heart disease using advanced machine learning algorithms**. The goal of our study is to develop a predictive system that can identify patients at risk of heart disease at an early stage—thereby facilitating timely medical intervention and improving overall healthcare outcomes.

To ensure the accuracy, robustness, and real-world applicability of our models, we are seeking access to **anonymized patient health records** containing a comprehensive set of diagnostic and lifestyle-related attributes.

We are specifically interested in the following medical and lifestyle attributes:

Medical Attributes

1. Age (range 15–40)
2. Sex (male/ female)
3. Chest pain type (1.typical angina, 2.atypical angina, 3.non-anginal pain, 4. asymptomatic)
4. Resting blood pressure (mmHg)
5. HDL/LDL cholesterol levels (mg/dL)
6. Fasting blood sugar (>120 mg/dL)
7. Blood sugar levels (HbA1c)
8. Random blood sugar
9. Resting electrocardiographic results
10. Maximum heart rate achieved
11. Exercise-induced angina (Yes / No)
12. Body Mass Index (BMI)
13. Diabetes status (Type 2 history) (Yes / No)
14. Family history of heart disease (Yes / No)
15. Triglyceride levels (mg/dL)
16. Diagnosis (Yes / No) if yes →
 - I. Myocardial Infarction (MI)
 - II. Congestive Heart Failure (CHF)
 - III. Valvular Heart Disease (VHD)
 - IV. Atrioventricular (AV) Block

Lifestyle & Socio-Demographic Attributes

1. Smoking status (current / former / non-smoker)
2. Physical activity level (sedentary / moderate / active)
3. Alcohol consumption (none / occasionally / frequently)
4. Dietary habits
5. Stress level / mental health (low / medium / high)
6. Sleep duration and quality (poor / fair / good)
7. Occupation type
8. Marital status

We assure you that:

- The data will be used strictly for academic and research purposes.
- No personally identifiable information (PII) will be collected or disclosed.
- Data will be securely stored in compliance with all applicable ethical and privacy standards.
- We are fully prepared to sign a **Non-Disclosure Agreement (NDA)** or **Data Sharing Agreement (DSA)**, as required by your institution.

Your support in providing such data will significantly contribute to the development of innovative healthcare technologies aimed at early intervention and preventive care.

Should you have any questions or require further information, we would be happy to provide additional details or arrange a meeting. You may reach us at the contact information provided below.

Thank you very much for considering our request. We look forward to your kind cooperation.

Sincerely,

Adibah Mahmud

Sadia Afrin Sithi

Department of Computer Science and Engineering

Bangladesh University of Engineering and Technology (BUET)

Contact Information

Emails:

adibahmahima@gmail.com

sadiasithi2001@gmail.com

Phone Numbers:

Adibah – 01731-055838

Sithi – 01755-709664

Research Supervision :

This research project is being conducted under the supervision of:

Dr. Sadia Sharmin

Associate Professor

Department of Computer Science and Engineering

Bangladesh University of Engineering and Technology(BUET)

Phone: 01817-108555

Email: sadiasharmin@cse.buet.ac.bd