

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202411023629 A

(19) INDIA

(22) Date of filing of Application :25/03/2024

(43) Publication Date : 26/04/2024

(54) Title of the invention : AUTOMATED BUG TRIAGE SYSTEM IN OPEN SOURCE PROJECTS

(51) International classification :G06F0008710000, G06F0011360000, G06N0020000000, G06F0011070000, G16H0050200000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)Name of Applicant :
1)Chitkara University
 Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

2)Chitkara Innovation Incubator Foundation
 Name of Applicant : NA
 Address of Applicant : NA

(72)Name of Inventor :
1)Dr. Ashima Kukkar
 Address of Applicant :Chitkara University Institute of Engineering and Technology, Chitkara University, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

2)Gagandeep Kaur
 Address of Applicant :Chitkara University Institute of Engineering and Technology, Chitkara University, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

3)Dr. Righa Tandon
 Address of Applicant :Chitkara University Institute of Engineering and Technology, Chitkara University, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

4)Dr. Yugal Kumar
 Address of Applicant :Department of Computer Science and Engineering, JUIT, Wagnaghat, Solan, Himachal Pradesh, India Solan -----

5)Dr. Rajini Mohana
 Address of Applicant :Department of Computer Science and Engineering, JUIT, Wagnaghat, Solan, Himachal Pradesh, India Solan -----

(57) Abstract :
 The present disclosure introduces an automated bug triage system in open source projects 100 which presents a comprehensive system to streamline bug resolution processes through advanced algorithms and deep learning models. It comprises of data gathering module 102, data preprocessing module 104, bug severity classification model 106, developer profile creation module 108, and developer assignment model 110, training data 112 and testing data 114. Historical bug reports are collected and pre-processed to extract meaningful insights. The system classifies bug reports based on severity levels and recommends suitable developers for resolution.
 REFERENCE FIG 1

No. of Pages : 21 No. of Claims : 10