A Robust Hybrid Machine and Deep Learning-based Model for Classification and Identification of Chest X-ray Images

Rana Jassim Mohammed

Department of Computer Science, College of Education for Pure Sciences, University of Basrah, Basrah, 61004, Iraq
rana.mohammed@uobasrah.edu.iq

Mudhafar Jalil Jassim Ghrabat

Iraqi Commission for Computers and Informatics, The Informatics Institute for Postgraduate Studies, Baghdad 10013, Iraq | Computer Science Department, Al-Turath University, Baghdad 10013, Iraq
mudhafar.jalil@iips.icci.edu.iq

Zaid Ameen Abduljabbar

Department of Computer Science, College of Education for Pure Sciences, University of Basrah, Basrah, 61004, Iraq
zaid.ameen@uobasrah.edu.iq

Vincent Omollo Nyangaresi

Department of Computer Science and Software Engineering, Jaramogi Oginga Odinga University of Science & Technology, Bondo 40601, Kenya | Department of Applied Electronics, Saveetha School of Engineering, SIMATS, Chennai, Tami lnadu 602105, India
vnyangaresi@jooust.ac.ke

Iman Qays Abduljaleel

Department of Computer Science, College of Education for Pure Sciences, University of Basrah, Basrah, 61004, Iraq
iman.abduljaleel@uobasrah.edu.iq

Ali Hasan Ali

Department of Mathematics, College of Education for Pure Sciences, University of Basrah, Basrah, 61004, Iraq | Institute of Mathematics, University of Debrecen, Pf. 400, H-4002 Debrecen, Hungary
ali.hasan@science.unideb.hu

Dhafer G. Honi

Department of Computer Science, College of Education for Pure Sciences, University of Basrah, Basrah, 61004, Iraq | Department of IT, University of Debrecen, Debrecen, 4002, Hungary
dhafer.honi@uobasrah.edu.iq

Husam A. Neamah

Mechatronics Department, Faculty of Engineering, University of Debrecen, Debrecen, 4028, Ótemető u. 4-5, Hungary
husam@eng.unideb.hu (corresponding author)