

(54) Title of the invention : IOT AND MACHINE LEARNING -BASED MONITORING SYSTEMS FOR WEATHER, SOIL, EARTHQUAKES, AND AIR POLLUTION

<p>(51) International classification :G06N002000000, G06Q0050020000, A01B0079000000, G06Q0010060000, G16Y0030000000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No :NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : 1)PROF.(DR.)RAHUL KUMAR MISHRA Address of Applicant :DIRECTOR SCHOOL OF COMPUTER SCIENCE AND APPLICATIONS IFTM UNIVERSITY DELHI ROAD, MORADABAD Pin:244102 UTTAR PRADESH INDIA -----</p> <p>2)Mr. BABA FAKRUDDIN ALI B H 3)Dr. Kamlesh Kumar Bhakuni 4)LAKSHMANACHARI SIDDI 5)Dr. G.Sakthivel 6)Dr. Rajesh Bhaskar Survase 7)Dr. ANIL KUMAR SINGH 8)Mr.G.Ravishankar 9)Dr.Belsam Jeba Ananth. M 10)Mrs.Janani 11)Dr. Harikumar Pallathadka Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : 1)PROF.(DR.)RAHUL KUMAR MISHRA Address of Applicant :DIRECTOR SCHOOL OF COMPUTER SCIENCE AND APPLICATIONS IFTM UNIVERSITY DELHI ROAD, MORADABAD Pin:244102 UTTAR PRADESH INDIA -----</p> <p>2)Mr. BABA FAKRUDDIN ALI B H Address of Applicant :TEACHING CUM RESEARCH ASSISTANT VELLORE INSTITUTE OF TECHNOLOGY, VELLORE PIN: 632014 TAMIL NADU INDIA -----</p> <p>3)Dr. Kamlesh Kumar Bhakuni Address of Applicant :Assistant Professor and Head, Department of Botany Laxman Singh Mahar Campus Pithoragarh, Soban Singh Jeena University Almora Pithoragarh Pin: 262502 Uttarakhand India -----</p> <p>4)LAKSHMANACHARI SIDDI Address of Applicant :ASSISTANT PROFESSOR INSTITUTE OF AERONAUTICAL ENGINEERING, DUNDIGAL MEDHAL MALKAJGIRI PIN: 500043 TELANGANA INDIA -----</p> <p>5)Dr. G.Sakthivel Address of Applicant :Professor Annamalai University, Annamalainagar, Chidambaram Cuddalore Pin:608002 Tamilnadu India -----</p> <p>6)Dr. Rajesh Bhaskar Survase Address of Applicant :Assistant Professor Department of Earth Science-Geography E. S. Divekar College Varvand Varvand, Tal. Daund, Pune. Pin:412215 Maharashtra India -----</p> <p>7)Dr. ANIL KUMAR SINGH Address of Applicant :Associate Professor, College of Computing Science, Teerthanker Mahaveer University, Moradabad. Pin:244001 Uttar Pradesh India -----</p> <p>8)Mr.G.Ravishankar Address of Applicant :Assistant Professor Karpagam Academy of Higher Education Deemed to be University Pollachi Main Road, Eachanari Post, Pin:641021 Tamilnadu India -----</p> <p>9)Dr.Belsam Jeba Ananth. M Address of Applicant :Associate Professor Department of Mechatronics Engineering, SRM Institute of Science and Technology, Faculty of Engineering and Technology, Kattankulathur Chengalpattu Pin: 603 203 Tamil Nadu India -----</p> <p>10)Mrs.Janani Address of Applicant :Assistant Professor, Department of Information Technology, Dr.SNS Rajalakshmi College of Arts and Science, Coimbatore Pin: 641049 Tamilnadu, India -----</p> <p>11)Dr. Harikumar Pallathadka Address of Applicant :Director and Professor Manipur International University, Ghari, Imphal, Imphal West, Imphal Pin: 795140 Manipur India -----</p>
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(57) Abstract :
IoT and Machine Learning -based Monitoring Systems for Weather, Soil, Earthquakes, and Air Pollution ABSTRACT: The proliferation of the Internet of Things (IoT) has expedited the process of change in various industries, such as environmental monitoring and agricultural. According to projections, it is anticipated that the global population will reach 9.7 billion by the year 2050. This suggests that there will be an increased need for food and natural resources to meet the needs of the growing population. As per the United Nations, there is a pressing need to augment the world food supply by 70 percent in order to adequately address the escalating demand resulting from population growth. The Internet of Things (IoT) has a multitude of prospects for augmenting agricultural practices, mitigating wastage, and monitoring worldwide patterns. The utilization of precision farming and environmental monitoring, exemplified by the Internet of Things, has the potential to address the increasing need for food and resources while concurrently mitigating their ecological consequences. The Internet of Things (IoT) possesses the capacity to fundamentally transform the agricultural sector and enable comprehensive worldwide surveillance. Precision agriculture, animal care, and environmental concern are associated with a multitude of advantages. This observation indicates that the Internet of Things holds promising prospects in these domains. By persisting in the advancement and utilization of these technologies, there is a possibility of foreseeing a future that is characterized by enhanced sustainability, efficiency, and productivity. We possess a high level of enthusiasm over the matter.

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