(12) PATENT APPLICATION PUBLICATION

(21) Application No.202241069479 A

(19) INDIA

(22) Date of filing of Application :01/12/2022

(43) Publication Date : 09/12/2022

(54) Title of the invention : Probabilistic Method in Applied Mathematics for Farming System Tracking through Machine Learning and the Internet of Things (IoT)

(51) International classification	:A01G0025160000, G06N0007000000, G06N0005020000, G06N0020000000, G09B0023020000
(86) International Application No Filing Date	:PCT// :01/01/1900
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
 1)**Dr Kiran S**
   Address of Applicant :Assistant professor Nitte Meenakshi Institute of Technology, P.B. No. 6429, Yelahanka, Bangalore Pin:560064 Karnataka India ----------- -----------
 2)**Dr. Savitha B**
 3)**Dr.K.T.Shivaram**
 4)**Mr. Vijay Dattatray Chaudhari**
 5)**Ms. Nithya.T**
 6)**Monika Kommineni**
 7)**Dr.R M MASTAN SHAREEF**
 8)**Dr Pradeep Kumar Vashistha**
 9)**Mr. Veerabhadrayya G Hiremath**
 10)**Dr. Vijay Kumar Salvia**
 11)**Dr. Harikumar Pallathadka**
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
 1)**Dr Kiran S**
Address of Applicant :Assistant professor Nitte Meenakshi Institute of Technology, P.B. No. 6429, Yelahanka, Bangalore Pin:560064 Karnataka India ----------- -----------
 2)**Dr. Savitha B**
Address of Applicant :Associate Professor RajaRajeswari College of Engineering, Mysore road, Bangalore, Pin:560074 Karnataka India ----------- -----------
 3)**Dr.K.T.Shivaram**
Address of Applicant :Assistant professor Mathematics Dayananda sagar college of engineering Bangalore Pin: 560078 Karnataka India ----------- -----------
 4)**Mr. Vijay Dattatray Chaudhari**
Address of Applicant :Assistant Professor GF's Godavari College of Engineering, P-51, M-Sector, MIDC area. Bhusawal road, Jalgaon. Pin: 425003 Maharashtra India ----------- ----------
 5)**Ms. Nithya.T**
Address of Applicant :Assistant Professor / Dept of Mathematics GITAM University, Bengaluru campus. PIN: 562163 Karnataka India ----------- -----------
 6)**Monika Kommineni**
Address of Applicant :Working Employee NIIT university, Neemrana Rajasthan Pin: 521101 Andhra Pradesh India ----------- -----------
 7)**Dr.R M MASTAN SHAREEF**
Address of Applicant :Assistant professor St.MARTIN'S ENGINEERING COLLEGE Dulapally, Near Kompally Secunderabad Medchal Pin:500100 Telangana India ----------- -----------
 8)**Dr Pradeep Kumar Vashistha**
Address of Applicant :DIRECTOR INSTITUTE OF APPLIED MEDICINE & RESEARCH GHAZIABAD Pin: 201206 UTTAR PRADESH INDIA ----------- -----------
 9)**Mr. Veerabhadrayya G Hiremath**
Address of Applicant :Assistant Professor Department of Mathematics, K.L.E Institute of Technology, Hubballi Pin: 580027 Karnataka India ----------- -----------
 10)**Dr. Vijay Kumar Salvia**
Address of Applicant :Director/Professor Research Innovation StartUp University Regd, Indore Pin:452018 Madhya Pradesh India ----------- -----------
 11)**Dr. Harikumar Pallathadka**
Address of Applicant :Director and Professor Manipur International University, Ghari, Imphal, Imphal West, Imphal Pin: 795140 Manipur India ----------- -----------

(57) Abstract :
Probabilistic Method in Applied Mathematics for Farming System Tracking through Machine Learning and the Internet of Things (IoT) ABSTRACT Probabilistic methods are utilised in both mathematics classrooms and everyday life. Experts in differential equation theory consider this a crucial instrument due to its adaptability. Paul Erdos was the most prolific discrete mathematician of the twentieth century. In the 1950s, he made substantial contributions to the development of the probabilistic method. Instead of displaying the item directly, we can define a probability space for a set of combinatorial objects and demonstrate that an object with the specified characteristics exists with a probability greater than zero. Instead of directly establishing the existence of a combinatorial object with specific required qualities, this is done. Numerous fields of mathematics and computer science employ probabilistic methods, including graph colouring and Ramsey theory, packing and coverings, coding theory, combinatorial number theory, random graphs and internet modelling, and randomised algorithms. In the past two decades, the popularity of the probabilistic technique has risen. This is because probability theory and the combinatorial method complement one another well. Traditional farming techniques have emphasised domain- or function-specific variables such as temperature, humidity, and pressure. There is no intelligent irrigation knowledge base, though. Due to the internet of things, people can now enjoy the huge amount of data collected by numerous sensors throughout time. This data can now be utilised in several ways. When IoT-based solutions are utilised, a tremendous volume of data flows in real time. These outcomes are the result of the capabilities of the programme. A solid technique for adopting IoT in a way that makes sense for industrial production and life-improving technologies is to apply analytics for massive data streams in order to discover new information, predict understandings, and make accurate, controllable judgments. Prioritize machine learning and deep learning in IoT since they facilitate analysis and learning in this field. Therefore, in this study, we will explore how to conduct a systematic analysis of the various agricultural systems.

No. of Pages : 14 No. of Claims : 9