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Application Details

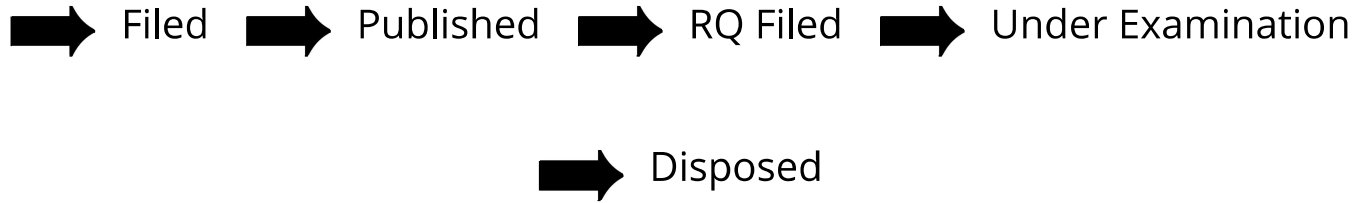
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TITLE OF INVENTION	A MACHINE LEARNING APPROACH FOR IOT DEVICE IDENTIFICATION BASED ON NETWORK TRAFFIC ANALYSIS AND METHOD THEREOF
FIELD OF INVENTION	COMPUTER SCIENCE
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(54) Title of the invention : A MACHINE LEARNING APPROACH FOR IOT DEVICE IDENTIFICATION BASED ON NETWORK TRAFFIC ANALYSIS AND METHOD THEREOF

<p>(51) International classification :G06N002000000, H04L002908000, H04L002906000, H04L001226000, H04W000470000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</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 :</p> <p>1)Dr.V.Sitharamulu Address of Applicant :Associate Professor, Department of Computer Science and Engineering, Institute of Aeronautical Engineering (IARE), Dundigal, Hyderabad, Telangana, India. Pin Code:500043 Hyderabad -----</p> <p>2)Dr.P.Lalitha Kumari</p> <p>3)Ms.Neelam Joshi</p> <p>4)Mr.Ravi Ray Chaudhari</p> <p>5)Mr.Sunidhi Shrivastava</p> <p>6)Mrs.B.Alekhyia</p> <p>7)Mrs.Manasa Yatagiri</p> <p>8)Mr.Namit Khanduja</p> <p>9)Mrs.Earli.Manemmma</p> <p>10)Dr.S.Hasan Hussain</p> <p>Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor :</p> <p>1)Dr.V.Sitharamulu Address of Applicant :Associate Professor, Department of Computer Science and Engineering, Institute of Aeronautical Engineering (IARE), Dundigal, Hyderabad, Telangana, India. Pin Code:500043 Hyderabad -----</p> <p>2)Dr.P.Lalitha Kumari Address of Applicant :Associate Professor, Department of Computer Science and Engineering, Malla Reddy Institute of Technology, Secunderabad, Telangana, India. Pin Code:500100 Secunderabad -----</p> <p>3)Ms.Neelam Joshi Address of Applicant :Assistant Professor, Department of Computer Science, Institute of Technology and Management, Gwalior, Madhya Pradesh, India. Pin Code:474011 Gwalior ----</p> <p>4)Mr.Ravi Ray Chaudhari Address of Applicant :Assistant Professor, Department of Computer Science and Application, ITM University, Gwalior, Madhya Pradesh, India. Pin Code:474001 Gwalior -----</p> <p>5)Mr.Sunidhi Shrivastava Address of Applicant :Assistant Professor, Department of CSA, ITM University, Gwalior, Madhya Pradesh, India. Pin Code:474001 Gwalior -----</p> <p>6)Mrs.B.Alekhyia Address of Applicant :Assistant Professor, Department of ECE, VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad, Telangana, India. Pin Code: 500090 Hyderabad --</p> <p>7)Mrs.Manasa Yatagiri Address of Applicant :Assistant Professor, Department of ECE, VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad, Telangana, India. Pin Code: 500090 Hyderabad --</p> <p>8)Mr.Namit Khanduja Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Faculty of Engineering & Technology, Gurukul Kangri (Deemed to be University), Haridwar, Uttarakhand, India. Pin Code:249404 Haridwar -----</p> <p>9)Mrs.Earli.Manemmma Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Nadimpalli Satyanarayana Raju Institute of Technology (A) (NSRIT), Sontyam, Pendurti-Anandapuram Highway, Visakhapatnam, Andhra Pradesh, India. Pin Code:531173 Visakhapatnam -----</p> <p>10)Dr.S.Hasan Hussain Address of Applicant :Associate Professor, Department of Computer Science and Engineering, Sri Venkateswara College of Engineering and Technology (Autonomous), Chittoor, Andhra Pradesh, India. Pin Code:517127 Chittoor -----</p>
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(57) Abstract :

The present invention discloses a machine learning approach for IoT device identification based on network traffic analysis and method thereof. The system includes, but not limited to, a memory which stores instructions; one or more processors attached to the memory wherein the one or more processors, when executing the instructions which are stored, are configured to have: a processing unit configured for receiving network traffic generated by an anonymous IoT device. Further, the processing unit is configured to have a machine learning interface for extracting IoT device network behavior from the generated network traffic. Furthermore, an output means for determining the identity of the anonymous IoT device from a list of a plurality of IoT devices by applying a selected machine learning based classifier module from a set of machine learning based classifier modules to analyze the device network behaviour. Accompanied Drawing [FIG. 1]

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