AutoFT – Automated Fluid Therapy for Dogs

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Abstract

Animal healthcare and well-being is a widely spoken topic in the world. Many activists speak against the animal cruelty and bringing justice for animals. Different organizations have been established to care and treat animals in different ways. Wellbeing of dogs are mostly spoken out these topics. Stray dogs are vaccinated and provided shelter by different groups of animal activists. Even general public are so much concerned about this. With this trend different systems and solutions are being implemented to help this cause.

With advancement of technology, healthcare sector has reached climax of technology improvement to support the chorus of doctors and people related to healthcare. So many advanced systems have been implemented to treat humans and animals. There is a higher growth of technology in human healthcare more than animal healthcare. But it cannot be denied that so many sophisticated systems have been implemented for animals as well.

A prominent treatment procedure used for both human and animals is fluid therapy. Someone with fluid deficiency are subjected to fluid therapy to provide fluid externally to balance the internal fluid balance. It is very crucial as fluid imbalance could lead to fatal injuries. Even though this treatment is so important, a very classical method is used to determine fluid types and fluid volumes. It is very disadvantageous as all the calculations are done manually and fluids are determined by doctors which is very time consuming and less efficient. So many patients are subjected to fluid therapy on daily basis making it really stressful and tiring for doctors to determine fluid volumes and types for a large crowd. Hence arises a necessity for an automated intelligent system do the job for them.

AutoFT is a fully automated system which determines the fluid type, fluid volumes including maintenance requirement, energy requirements and provide guidance for critical situations. It is a very convenient solution for doctors who face difficulties dealing numerous patients daily, reducing the workload and giving more time for them to use their brains on other important decision making.

Keywords: Machine learning, fluid therapy, fluid volume

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