

## University of Peradeniya

## **Al-Driven Renal Care Management** Teaching Hospital, Peradeniya

Supervised by: U. Jayasinghe<sup>1</sup>, R.A. Abesekara<sup>2</sup>, S. Krishnapradeep<sup>2</sup>, N. Piyarathne<sup>3</sup>, H.Usoof<sup>4</sup>, U. Ariyarathne<sup>5</sup> <sup>1</sup>Faculty of Engineering, UoP. <sup>2</sup>Faculty of Medicine, UoP. <sup>3</sup>Faculty of Dental Sciences, UoP. <sup>4</sup>Faculty of Science, UoP. <sup>5</sup>Faculty of Management, UoP.

**Abstract-** Integrating AI into dialysis care revolutionizes treatment and outcomes by personalizing therapy, easy access of patients receords, and optimizing renal replacement therapy. Advanced algorithms analyse patient data, predict disease progression, and enhance safety. AI adjusts therapy settings and fluid removal rates, improving the quality of life for hemodialysis patients by focusing on fluid, hemoglobin, and access investigations.







Contact details Name : Dr. U. Jayasinghe Tel. No.: +94760416590 Email : upuljm@eng.pdn.ac.lk

Multidisciplinary AI Research Centre (MARC) University Research Council University of Peradeniya Peradeniya, 20400, Sri Lanka

