

IoT-Based Medical Control System

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Abstract—This paper is concerned by the fact that the health sector represents a major development challenge for emerging countries. However, it faces many challenges that affect the quality of care provided and makes it almost impossible to guarantee an adequate level of accessibility for all social classes of the population. These reasons motivated us to study a medical control system based on the Internet of Things that could significantly improve the conditions of medical care and ensure effective and effective medical follow-up by automating the process of taking during the consultations and by preserving the information thus obtained for restitution in case of emergency or medical follow-up of the patients. At the end of our study, we were able to define the challenges posed by technological tools in improving the conditions of health structures and to simulate the functioning of the system we designed.

Keyword—IoT; DataCenter; Cloud & Fog Computing; Java, Visual Programming, Health



Dr. James K. Tamgno, As a senior lecturer at ESMT, This author became a Member (M) of IEEE in 2012, he obtained my Ph.D in may 2013 at University Cheikh Anta Diop of Dakar. My researches focused on Promotion of African's languages and dialects and Contribution to a Wider Accessibility of ICT, by Circumventing Language Barriers and Lessening the Impact of Illiteracy or Disability. Previously I have gotten a M.Sc. in Engineering Science from Cheikh Anta DIOP University of Dakar, studied numerical analysis and mathematics at Yaoundé I University of Yaoundé, and worked as a research scientist.



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Pr. Claude LISHOU is Professor of Universities at the Ecole Supérieure Polytechnique of Cheikh Anta Diop University in Dakar (Senegal). He teaches several disciplines ranging from industrial computing to new generation networks in the electrical engineering and computer engineering sections. Director of the Virtual Platform of the UCAD, coordinates the information system and oversees the strategy of open and distance training at his university. He leads an internationally renowned research and development laboratory dedicated to the use of ICT in education and training, environment, energy, transport, e-governance. On the scientific level, he is the author and co-author of several publications in scientific journals with international circulation. Professor LISHOU is a member of several scientific societies, member of editorial committees of scientific journals, member of the Networks of Information and Communication Technologies for teaching and research, Editor in chief of the Journal of Sciences for Engineers . For more than two decades, he has supervised and supported dozens of engineers and researchers in these areas, especially in western Africa. A recognized expert in the development of ICT applications and services, he divides his time between teaching, research and consulting with international organizations (OIF, AUF, UNDP, UNESCO, UNCTAD...).