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| **Title:** | Augmentation of Battery Management Systems in Smart-Grid operation using Fuzzy Logic | | |
| **Author(s) Name:** | Sabiqun Nahar; Md. Redowan Mahmud Arnob; Abu Hena Md. Shatil | | |
| **Contact Email(s):** | abu.shatil@aiub.edu | | |
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| **Abstract:** |  |
| This paper proposes an idea of optimizing battery management system using fuzzy logic for a smart grid system. The involvement of a fuzzy logic controller makes the existing control mechanisms for the battery management system more intelligent hence allowing the system to prioritize between the loads and multiple batteries in the battery storage system (BSS) which enables the utilization of the harnessed solar energy with greater service continuity. This design involves a much more effective algorithm of a load and battery management system using fuzzy sets which allows to optimize solar power utilization and maintaining smooth battery health conditions. Finally, a comparative study is illustrated showing the differences between a system working with a greater number of membership functions (64 rules) and the one working with only two membership functions (8 rules).. | |