



FINAL YEAR PROJECT REPORT

AUTOMATION BASED POWER DISTRIBUTION CONTROL STATION USING PLC AND SCADA

**In fulfillment of the requirement
For degree of
BEE (Electrical Engineering)**

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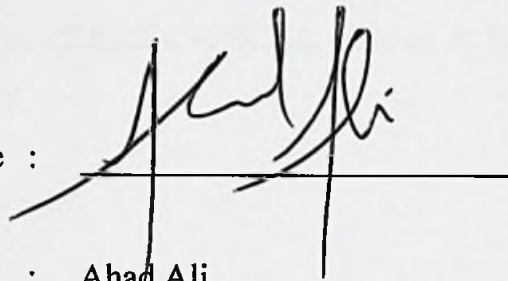
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**BAHRIA UNIVERSITY (KARACHI CAMPUS)
2018-2022**

DECLARATION

We hereby declare that this project report is based on our original work except for citations and quotations, which have been duly acknowledged. We also declare that it has not been previously and concurrently submitted for any other degree or award at Bahria University or other institutions.

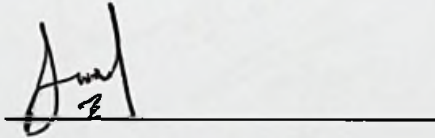
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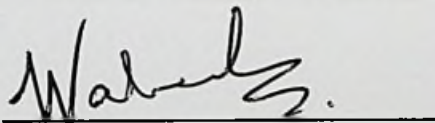
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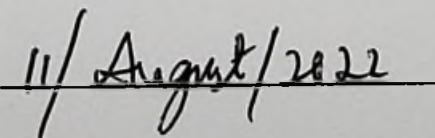
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ACKNOWLEDGEMENTS

First and foremost, I would like to praise Allah the Almighty the Most Gracious, and the Most Merciful for His blessing given to me during my study and in completing this thesis, And for everyone who had contributed to the successful completion of this project. We would like to express our gratitude to our research supervisor, **Engr. TAIMOOR ZAFAR**, for his invaluable advice, guidance, and enormous patience throughout the research development.

In addition, I would also like to express my gratitude to our loving parents and friends who had helped and encouraged us.

AUTOMATION BASED POWER DISTRIBUTION CONTROL STATION USING PLC AND SCADA

ABSTRACT

Fault diagnosis is fundamental and essential part of fault isolation and analysis of faults for study of power system. Automatic fault diagnosis problem is considered in this system. We are proposing a fault identifier to classify the fault occur in the system. This project focuses on locating fault in power system and transmit the acquired data to control panel. The power distribution panel contains protection equipment like (CT's, circuit breakers, PLC, magnetic contactors, EOCR, MCB, relays). In this 3-phase system we connect all the electrical equipment's for a safety purpose of the components. After that we input the data into programmable logic controller (PLC) and scale down the current (4-20mA) to current monitoring and controlling. We use different software's for programming and interfacing the data. We use SCADA software for monitoring and storing the real time data and transmit the all data in cloud server. In this project, SCADA system exhibit the consumption of a distributed load. If fault occur in the system breaker should trip to protect the electrical panel and deduce the exact location of failure in 3-phase system.

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