

**DEVELOPMENT OF AUTOMATIC SPEED CONTROLLER
FOR THE WARD LEONARD SYSTEM**

**This is presented to fulfill the
requirement of Advance Diploma in Electrical
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in time

Amin

PREFACE

Applications of personal computers have expanded throughout modern society and will continue to do so to the limits of imaginations. This project mainly concentrated on the Development of Automatic speed controller for Ward Leonard system. The personal computer will act as a host PC that will controlled the input and output operations from the real world to the computer world and vice versa. Proper interfacing between the personal computer (Host PC) and the real world is very important in order to achieve the desired goal.

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1.0 INTRODUCTION

Jabatan Pengaliran dan Saliran, Malaysia a government department fully responsible for planning, monitoring and controlling of irrigation system throughout the entire country. Furthermore they are also responsible for the monitoring of floods for various purposes such as evacuation of residents in emergencies and providing information for travelers etc. In order to monitor such events they have installations of monitoring devices through a network of telemetry to measure parameters such as water flow, speed etc. to enable a forecast to be made on the conditions at various critical sites or purposes of regulating the irrigation canal to various farmers in the country.

To ensure accuracies of one such instrumentation systems; the transducer for current water meter calibration is located on a platform that is controlled for movement in one particular direction. This movement using electric machines that provides the current speed required to calibrate the system. To facilitate speed control; various velocities are achieved through the used of Ward Leonard Control System.