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河北工业大学博士学位论文 (For PhD)

**论文题目(In English)**

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Dissertation Submitted to

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Here Is The Subject or Specialty You Engage

**HERE IS THE TITLE OF DISSERTATION/ THESIS**

By

Xing Mingzi

Supervisor: Prof.

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摘 要

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**关键词**：；

**ABSTRACT**

(Times New Roman 12 1.25 times-spaced)

**Key words**: ;

**Contents**

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**List of Tables**

**List of Abbreviations**

**Chapter 1 (Times New Roman 18 Bold)**

**1.1 (Times New Roman 16 Bold)**

(Times New Roman 12 1.25 times between the lines)

To reduce the energy consumption as well as increase its availability, most of the research has been done to get the energy from its environment in which nodes are deployed. Energy harvesting techniques are using, to make the sensor nodes operational, from sun [1, 2, 3], wind [4], and vibration [5].

## 1.1.1 (Times New Roman 14 Bold)

1. **(Times New Roman 12 Bold)**
2. **(Times New Roman 12 Bold)**

|  |
| --- |
| IO Devices OS Process Internet Work Internet Work OS Process IO DevicesSourceFlowDestinationPacket Scheduling & Flow Control QoS Consideration & Management |

Figure 1.1 QoS Data Sequence



Figure 1.2 Nikola Tesla with his Wardenclyffe power station in New York

Table 1.1 Functionality of a sensor node

|  |  |
| --- | --- |
| Name of Module | Functionality |
| Power Module | It provides power for the working of node |
| Sensing Module | It senses the events from the environment  |
| Communication Module | It helps to transmit data from one to other and base station as well. |
| Processing Module | It processes the collected data for the specific task. |
| Execution Module | It calculates the results  |

**References**

**Achievements During Doctoral/ Master Research Duration**

**Acknowledgments**