### **CERTIFICATION OF APPROVAL**

### PERSONAL ELECTRIC VEHICLE PROTOTYPE DEVELOPMENT

by

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# CERTIFICATION OF ORIGINALITY

This is to certify that I am responsible for the work submitted in this project, that the original
work is my own except as specified in the reference and acknowledgement, and that the
original work contained herein have not been undertaken or done by unspecified sources or
person.

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#### **ABSTRACT**

The Personal Electric Vehicle (PEV) is not a new thing or new discovery. The truth is this vehicle is already invented since late 1990s. By using electricity as the main source, PEV can transport one person over trip distance up until 10km. The concept in designing a PEV basically is taken from scooters and cycles. Also, the system architecture of PEV is taken from common electrical vehicle. However, the drive mechanism and the performance of a PEV is still one of the major issues where it is still consider as newbie and it limits the development of this technology. Basically, this project is a continuous work from previous research. The aim of this project is to develop a prototype with facility to test PEV drive mechanism and evaluate their performance based on specification given. In order to complete the objective, the detail design for each part involve in building a PEV is developed so that each part can be analyze. It is also important to consider the material selection used since the PEV prototype will involve series of performance evaluation. At the end of this project, a PEV prototype is developed with facility to test its performance and its drive mechanism.

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