VIRTUAL DESIGN OF MULTI-AXIS POSITIONING FOR ROBOTIC APPLICATION

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Report submitted in partial fulfillment of the requirements
for award of the degree of
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SUPERVISOR'S DECLARATION

We hereby declare that we have checked this project and in our opinion this project is satisfactory in terms of scope and quality for the award of the degree of Bachelor of Mechanical Engineering.

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Position : Lecturer

Date : 6 November 2008

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Name of Panel : MR. SEMIN

Position : Lecturer

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STUDENT'S DECLARATION

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged. The thesis has not been accepted for any degree and is not concurrently submitted for award of other degree.

Signature

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Date: 6 NOVEMBER 2008

For my beloved parent, sisters and brother,
thanks a lot for your tolerance, love and encouragement...

For my dearest friends and course-mates,
thanks a lot for supporting me for this time...

"Life is meaningless without you all..."

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L	Langrangian term
T	Total kinetic energy
ρ	Mass density
$\dot{u}, \dot{v}, \dot{w}$	Velocity component
u, v, w	Displacement component
P	Total number of DOFs
q	Nodal velocity

LIST OF ABBREVIATIONS

DOF	Degree-of-freedom
FE	Finite element
LCD	Light Crystal Display
CAD	Computer Aided Design
MES	Mechanical Event Simulation
FEM	Finite Element Method