Supervisors:
External: Mr Manurajh Thurairajah <manurajh@ee.usyd.edu.au>
Academic: A/Prof Dave Levy <dlevy@ee.usyd.edu.au>

Meetings by appointment only. Please email to arrange time. When emailing me use the words [THESIS 2011] - FIRST NAME as subject to stop your email going into SPAM.

Important notes:
These projects will be undertaken under the direction of Manurajh Thurairajah and are potentially commercially sensitive.

These projects will have special requirements with regard to the intellectual property, confidentiality and copyright that may arise from them. Please consult the supervisor before requesting a project to ensure you are happy to work within the IP/confidentiality/privacy constraints. Students will be required to usually sign confidentiality, copyright and intellectual property agreements for most of these projects.

Students who wish to undertake any of these projects must endeavour to contact Manurajh Thurairajah at manurajh@ee.usyd.edu.au to arrange an initial discussion or interview. Some of these projects may be sponsored commercially. Some of these projects may also provide full time work after the project. Please contact and discuss for further details.

Projects from previous years:
Topics from previous projects may be considered upon request:
* 2007 projects
* 2006 projects
* 2005 projects
* 2004 projects
* 2003 projects
* 2002 projects

Note sponsoring company is prepared to sponsor certain projects on the following basis:
- Students with WAM > 80 will be paid $2000 for the project
- Students with WAM > 75 will be paid $1500 for the project
- Students with WAM > 70 will be paid $1000 for the project
- Students with WAM > 65 will be paid $500 for the project

Please discuss with supervisor for exact terms and conditions.

PROJECTS

<table>
<thead>
<tr>
<th>Topic ID</th>
<th>Title</th>
<th>No. of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTDL1</td>
<td>Structured eCommerce Search Engine</td>
<td>Up to 1</td>
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| ASP/PHP

Google, Yahoo and other search engines are somewhat unstructured in that they search all content. However, if you are after a specific product, eg: the Nokia 97 phone, you really want the search engines to return website that provides specs on it, websites that sell the product, reviews of the product, and a section for support, in a structured format so you can better compare the options.

It may be better if the data was structured, so when you search for places that sell the product, it will return prices and locations and url.

The aim of this project is to integrate existing ecommerce systems to enable a global structured search engine.

Project has scope for both online and mobile platform work.

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<tr>
<th>Topic ID</th>
<th>Title</th>
<th>No. of students</th>
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<tbody>
<tr>
<td>MTDL2</td>
<td>Enterprise Grade eCommerce System</td>
<td>Up to 1</td>
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</table>
| ASP/PHP

The aim of this project is to develop better ecommerce systems on PHP/ASP.

This project will require the student to work with mySQL, IIS/Windows and PHP and ASP. The student will be required to introduce innovative new features to this package, analyse performance issues, and compare it to other commercial packages, and generally improve and make the package more user friendly and easier to use.

Some improved modules the student could introduce are better customer management, order tracking, and supply side management. Project has scope for both mobile platform and online development.
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<tbody>
<tr>
<td>MTDL3</td>
<td>eCommerce Database Replication Manager</td>
<td>Up to 1</td>
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</table>

**ASP/PHP**

The aim of this project is to develop better database management systems for ecommerce systems on PHP/ASP. This project will require the student to work with mysql, IIS/Windows and PHP/ASP extensively. The common problems faced by industry is importing data from one system to another. The student will be required to introduce and develop better database management and synchronisation tools.

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<tr>
<td>MTDL4</td>
<td>eCommerce Website Security Analysis</td>
<td>Up to 1</td>
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</tbody>
</table>

**HTML/ASP/PHP**

The aim of this project is to analyse website security of existing websites, and provide and develop solutions that can be used by people to better secure commercial websites. Common website exploits should be analysed, and easily deployable solutions developed to protect and secure commercial websites.

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</thead>
<tbody>
<tr>
<td>MTDL7</td>
<td>Marketing on the Internet</td>
<td>Up to 1</td>
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</tbody>
</table>

**Written Thesis with Research**

Viral marketing, social marketing, and other new methods of marketing are constantly being developed. The purpose of thesis is to explore and develop new methods to effectively market ecommerce websites. The student may be provided with some real websites to test their theories and arrive and best marketing practices. The student may be required to develop software and tools to allow website owners to better market their websites. The students may be required to test and prove their theories with real life websites.