

Hao Wooi Lim

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Personal Information

Nationality: Malaysian Date of birth: 25th April 1984
Gender: Male Marital status: Single

Education

May 2009 – Master of Computer Science
Now **Universiti Tunku Abdul Rahman**, Setapak, Malaysia
Project: “Generic Object Classification”
May 2005 – Bachelor of Information Technology (Hons) Computer Engineering
May 2008 **Universiti Tunku Abdul Rahman**, Petaling Jaya, Malaysia
Project title: “Learning-based Robust Vehicle License Plate Detection using Fast Adaptive Graph-based Segmentation and Support Vector Machine”
CGPA 2.9271/4
Mar 2003 – Diploma in Science (Information Systems Engineering)
Mar 2005 **Tunku Abdul Rahman College**, Setapak, Malaysia
CGPA: 3.2168/4

Certifications

- SL110 Fundamentals of the Java Programming Language.
- Certificate of Attendance for a 3-day course “Introduction to C#”.

Awards

- **Google Code Jam 2009**
Reached Round 1C with a world wide rank of 1800th.
(link to statistics: <http://www.go-hero.net/jam/09/name/zybler>)
- **Bitwise 2009 Online Algorithm Programming Contest**
Placed 33rd among 2700 teams from around the world.
- **Microsoft Imagine Cup 2008 – Software Design**
Project: Intelligent recycle bin management system
2nd among 5 teams in the Malaysia finals.
- **Bitwise 2008 Online Algorithm Programming Contest**
Placed 24th among 2911 teams from around the world.
- **PanaGEEK 2007 programming competition**
Top 20 in national first round, 3rd prize in final.
- **Microsoft Imagine Cup 2005 – IT category**
Achieved a semi-finalist finish.

- **Developer Generation-X 2001**

Project: zMarketPlace – An auction site written in ASP (VBScript)
2nd place in national first round, consolation prize among 15 in final.

Past Projects

1. Wood Cutting and Allocation system (WoodCAS) – WoodCAS is a program written in C++ that uses the OpenCV library. It allows user to input an image of a wood log, key in the desired items size and the system would be able search for the top K best way to cut and allocate items that best optimizes the recovery (either by volume or value).
2. Edgeyo – Edgeyo is a web-based system written in PHP and MySQL with a custom-made PHP framework. It's a crowdsourcing marketplace for startups. This is a collaborated project with another coworker.
3. Custom Collapsible Box Control – This is a small project undertaken during my time in Panasonic. It's just a simple C#-based custom collapsible box user control.
4. VECON – VECON is an implementation of the paper “Automatic Character Recognition for Moving and Stationary Vehicles and Containers in Real-life images” by J.C.M Lee. It is written in C++ and uses the OpenCV library.
5. License Plate Detector – This is a simple license plate detector (a degree final year project) developed with Pedro F. Felzenszwalb and Daniel P. Huttenlocher's graph-based image segmentation algorithm (their algorithm is open source but I have to port it over to use OpenCV). It uses variance-based features and is integrated with libsvm. The language used here is C++ and uses the OpenCV library.
6. PicsPay – PicsPay is a web-based application written in PHP and MySQL with the Kohana PHP framework that allows user to upload pictures and browse pictures posted by other users. The pictures and artwork was provided by the client.
7. zMarketPlace – zMarketPlace is an auction site written in ASP (VBScript) and with Microsoft Access as the database. This is written in the year 2001 for the competition “Developer Generation-X” listed in the “Awards” section above. The auction site has an item directory that allow users to browse for items. It featured an advanced search functionality. It also allows user to login and add items to watch list. Finally, it has an autobid functionality.

Publication

- [4] H. W. Lim and Y. H. Tay
Detection of License Plate Characters in Natural Scene with MSER and SIFT unigram Classifier,
IEEE Conference on Sustainable Utilization and Development in Engineering and Technology 2010 (STUDENT'10), 2010.
- [3] H. W. Lim and Y. H. Tay
Vehicle License Plate Detection using Unigram Model and Difference-of-SURF Bigram Model with SVM,
Symposium on Progress in Information and Communication Technology 2009 (SPICT'09), 2009.

- [2] W. T. Ho, H. W. Lim and Y. H. Tay
Two-stage License Plate Detection using Gentle Adaboost and SIFT-SVM,
Intelligent Information and Database Systems (ACIIDS'09), 2009.
Acceptance rate: (30%)
- [1] H. W. Lim and Y. H. Tay
Fast Adaptive Graph-based Segmentation with application in Vehicle License Plate Detection,
5th International Symposium on Neural Networks (ISNN'08), 2008.
Acceptance rate: 192/522 (36.7%)

Peer Review

- [2] 2nd IEEE International Conference on Computer and Communication Technology (ICCCT – 2011)
- [1] Xian Yi Tan, A review of the License Plate Recognizer Architecture.

Working Experience

- **Project Research Assistant** Universiti Tunku Abdul Rahman 2 months
- **Research & Development Engineer** Panasonic R&D Centre Malaysia 1 year
- **Research Scholar** Universiti Tunku Abdul Rahman 5 months

Computer Skill

- **Low-level programming languages:** 8088 assembly, PIC16 assembly, ANSI C, Verilog
- **High-level programming languages:** QBasic, C++, Java, C#4.0, LINQ, Visual Basic, Visual Basic.NET, MATLAB
- **Library:** Boost C++ library, OpenCV 2.29, Pthreads, Qt library
- **Graphics design:** Adobe Fireworks, Adobe Flash
- **Source control:** SVN, Mercurial, Git
- **Web development:** HTML 5, CSS 3, JavaScript, PHP, ASP (VBScript), ASP.NET
- **Database:** MySQL, Microsoft Access
- **Operating Systems:** Ubuntu Linux, Windows

Natural Languages

Chinese, English, Malay