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Gender: Male
Nationality: Malaysian
Availability: 2 Months' Notice



Career Objective

- To work in a dynamic and positive atmosphere, which promotes creative and innovative R&D culture, with a great team that has strong passion and enthusiasm.
- To demonstrate my strong program and project management skills, consultancy skills, in-combination of my rich experiences in technical and research; especially in the domain of Real-time Big-data Analytic, IoT and Computer Vision; for cutting-edge technology innovations and developments.

Area of Research Interest

Big-data Analytic (Spark, Hadoop Eco-systems, Autonomy, Vertica, Apache Mahout), Computer Vision, Image Processing, Image Understanding and Analysis, Semantic Technology, High Speed Computing, Artificial Intelligent.

Education Background

Level: Master of Computer Science, University Of Malaya, Malaysia
Field Of Study: Image Processing & Computer Vision, Bio-Modeling Systems, Computer Graphics, High Performance Computing
Research Topic: [Dynamic Mechanic Of Fiber-Fluid Model Of Human Heart Using High Speed Computing Technique](#)
Graduation Date: August 2005

Level: Bachelor's Degree (Honors), University Of Malaya, Malaysia
Grade: 1st Class (3.71 out of 4.00)
Field Of Study: Computer Science and Information Technology, major in Artificial Intelligence
Thesis Title: [Dynamic Bandwidth Allocation implementing Neural-Fuzzy Technique Simulated in JAVA Network Simulator](#)
Graduation Date: March 2002

Summary of Working Experiences

6+ years of experiences in Big-Data Real-time Analytics in HP and HPE, involving technologies such as Hadoop, Kafka, Spark, Elasticsearch, SAS, Autonomy and Vertica.

- Led a team of 4, delivered Hadoop-Spark Real-time Intelligent Analytic & Visualization platform for rapid PoC development. ([Details](#))
- Delivered solutions in Real-time Prediction, Classification and Outlier Detection implementation using Spark MLlib. ([Details](#))
- Worked as Solution Architect for Spark Real-time Healthcare IoT Monitoring Analytic Solution for Hospital in Europe. ([Details](#))
- Be the Hadoop Consultant & Spark Solution Consultant for ETL solution for local vendor to serve the largest telecommunication company.
- Worked as a program manager, driving a center wide and technology practice initiatives in Big-Data Era Evolution Program (BEEP), Hackathon, and launch of Digital Revolution in HPE campus at Cyberjaya, which involved roughly 150 participants in 2016.
- Worked as a project manager, project lead, delivered 9 projects in 3 years.
- Worked as Data Scientist, delivery 1 project and won 1 competition using open government data.
- Led a team of 4, delivered 2 Hadoop-based proof-of-concept solutions.
- Led a team of 30+ people in organizing site-level programs for employees' up-skilling and employees' engagement.
- Led a team of 2, delivered 2 Autonomy-based proof-of-concept.
- Delivered 6 white papers, received center-wide Top Paper award and HP CIO Recognition on Outstanding Idea Award.
- Involving in EG TS Attach & Annuity Business Intelligence IT project to drive sales growth at the WW level using SAS 9.3 & 9.4 and SAS Enterprise Miner (EM) as the advanced analytics tool, especially in performing partner segmentation and clustering for extracting insights embedded in the data.
- Involved in multiple visualization technologies in report creation, such as QlikView, Tableau and Grafana (Real-time visualization tool) etc.

8 years of experiences in Computer Vision & Image Processing technologies, including machine vision inspection, biological computation simulation and visualization:

- Delivered 4 industries products.
- Prototyped 4 in-house machine vision solutions.
- Explored and designed a machine vision project on quality inspection to achieve faster and higher aperture count (more than 1 million apertures, 75 micron in diameter) and 100% inspection coverage for wafer bumping and solar industry stencil.
- Designed and developed 2 projects on bio-modeling simulation and visualization, leading to 2 journal papers publications.

7 years of experiences in Artificial Intelligent including various Neural Network, Fuzzy logic, Genetic Algorithm and Machine Learning:

- A seasonal developer of AI components (e.g. Solving Travelling Salesman Problem using GA); Code is available [online](#).
- Designed and developed Neural-Fuzzy algorithm for ATM network simulation during undergraduate study.
- Co-supervised 2 master students in Genetic Algorithm research and implementation.
- Experienced in Apache Hadoop and Apache Mahout for large data set processing.

3 years of experiences in Semantic Technology including:

- Secured a total of RM400K science funds from Ministry of Science and Technology Malaysia for Image Understanding research projects.
- Published 6 conference papers; disclosed 12 patents, filed 4 patents and 8 pending applications in progress.
- Developed an image understanding prototype system using multiple low-level visual features incorporate in ontology for objects identification and image annotation.
- Integrated Image Understanding to Linked Open Data (LOD) to enrich image content and annotate images by constructing the conceptual graphs as knowledge representation.
- Developed a prototype on Ontology Independent Question Generation for the Intelligent Learning Management System (iLMS).
- Session chairs of the 2010 and 2012 International Conference of Semantic Technology and Knowledge Engineering in Malaysia.

13 years of experiences in software development in-depth knowledge in Visual C#, Visual C++, C, Java & Web development technology:

- 5 years of experiences in Visual C#, successfully delivered 4 industries machine vision solution over multiple system development life cycles.
- 2 years of experiences in Visual C# integration with an existing framework, successfully delivered 1 automation system from system design until on site production testing, adopting CMMI Level-3 process.
- 1 year of experience in bio-information web portal development (covering 1st phase delivery using PHP, MySQL, AJAX technologies).
- 2 years of experiences in Visual C++ on software development and testing.
- 2 years of experience in C/C++/OpenGL on biological computation system prototyping, research & development.
- 3 years of JAVA & Web Service experiences, delivered 4 software components integrated into SOA platform, adopting CMMI Level-5 process.

7+ years of experiences on entrepreneurship and consultancy works, including:

- Hold the role of Data Scientist and ecommerce actionable analytic IT Advisor of the Malaysia largest office equipment retail company from 2016.
- Hold an A.I Consultant and Project Manager role in start-up companies, driving end-to-end product development from business idea to marketable solution in generating revenue.
- Big-data Hadoop & Real-time analytic consultancy works in Malaysia largest Telecommunication Company.
- Awarded 4 government grants and delivered successfully.
- Delivered 4 industry customers projects.
- 2 years of experiences in pre-sale, sale and post-sale activities.

Working Experience

DXC Technology www.dxc.technology/my

Apr 2017 – Present

IT Expert / Solution Architect / Data Scientist / Project Manager

- Similar to previous role and responsibility in HPE as DXC Technology is a split-merge company from HPE ES Division with CSC (Computer Sciences Corporation).

Hewlett-Packard (HP) Multimedia Sdn. Bhd. www.hpe.com

Sep 2012 – Mar 2017

IT Expert / Project Manager / Data Scientist

Responsibilities :

- Manage multiple diverse teams, consist of roughly 25~30 peoples located from Malaysia, China, Mexico and India; facilitating discussion and communication platform in driving toward problem solving, removing obstacles and archiving consensus.
- Manage multiple projects in Business Intelligent domain, from scope analysis, requirements gathering through development phase, testing phase until UAT and project delivery to end user.
- Responsible as Reusable-Component contest lead in Malaysia, reviewer and selecting the winner of the contest.
- Responsible in coaching interns and their assignments.
- Responsible in requesting source data, understanding, cleaning, validating and preparing analyzable data, by following CRISP-DM methodology. Performing Segmentation and Clustering methodology using SAS EM for concluding insights from the data.
- Manage a team of peoples to set up Hadoop processing environment, (consists of HBase, Hive, Flume, Sqoop, Oozie, Mahout, Pig, Map-Reduce program development environment, MapR admin and etc).
- Lead R&D on big-data analytic systems by proposing, implementing, testing on various Proof-of-Concept systems.
- Lead R&D on innovative data analytic solutions for latent information discovery from large amount of structure, semi-structured and un-structured data.
- Lead R&D on 'Meaning-based computing' system, i.e. Autonomy software.
- Manage multiple PoC projects and communicate closely with business users to capture features that contribute significantly to business values and translate them into PoC system.
- Responsible in building big-data analytic skillsets (Spark, Kafka, Hadoop, Autonomy and Vertica) within the team to cultivate and contribute on potential projects.
- Participate and contribute efforts in Hadoop, Autonomy and Manufacturing Execution System (MES) Center of Practice (CoP) at hp.com Tech team in Malaysia.

Accomplishments:

- Successfully conducted and delivered a center wide and technology practice initiatives in Big-Data Era Evolution Program (BEEP), consists of 14 sessions, 15 Hadoop Eco-systems technologies, and a Hackathon event which involved roughly 150 participants in 2016.
- Successfully coached 6 interns in completing HPE works and assignment, graduated from their university program in 2016.
- Successfully delivered 9 projects until year 2016. Involved into 2 projects which is in Red status and successfully turn it into Green by communicating with stakeholders, developers and release managers in achieving consensus between IT processes and project deliveries for enabling project to move forward even in a timeline pressured situation.
- Built-up in-depth hands-on experiences on Spark, Kafka, MLlib and complete the development of Real-time Intelligent Analytic & Visualization platform for rapid PoC development.

- Built-up in-depth hands-on experiences on Autonomy product family.
- Built-up in-depth hands-on experiences on Hadoop and Vertica technologies.
- Contributed efforts in a big-data analytic project, which processes daily 80GB of log data in 16 data nodes Hadoop clusters, output data into HBase and Vertica servers.
- Implemented 4 PoC systems based on Hadoop and Autonomy technology.
- Delivered 6 technical papers, related to Hadoop and Autonomy technology.
- Presented 1 paper on Autonomy technology in Tech Day event at HP ShangHai
- Presented 2 papers on Hadoop technology in Tech Day event at HP Malaysia.
- Published 2 posters on Autonomy and Hadoop technologies in New-style of IT competition at HP Malaysia.

MIMOS BERHAD www.mimos.my

Apr 2010 – Sep 2012

Staff Researcher

Responsibilities:

- R&D on Semantic-based Intelligent Software Components.
- Developed prototypes and demo systems to show capabilities of and practical problems addressed by semantic technologies, drove technology transfers to product groups, and helped create and execute incubation projects to [MIMOS Semantic Technology Platform](#).
- Developed AI related software as web service components contributing to [Intelligent Informatics Platform](#), which adopts SOA development environment.
- R&D on Image Understanding software components, which consists of various low-level image processing techniques, such as visual descriptors construction, image segmentation, features of interest extraction, color analysis and image classification
- R&D on low-level image processing mechanism in combination with semantic technologies for high-level conceptual knowledge analysis of images. Domain consisted of natural images, CCTV surveillance images and health care images, such as MRI, CT and X-Ray images.
- Generated and published patents related to semantic and image processing research domain.
- In-charged of organizing conferences, paper reviews, paper publications and knowledge sharing tasks.

Accomplishments:

- In-depth understanding of semantic technology knowledge such as RDF, RDFS, OWL, SWIRL, SPIN, JENA.
- Involved in ontology engineering and knowledge management processes.
- Published 8 papers, in which 3 papers focused on semantic technology domain, 5 papers related to image processing and analysis domain.
- Generated 12 patents ideas from year 2010 until 2012, 5 have been filed to date.
- Developed PoC system, entitled “Automatic Semantic Question Generation and Assessment System”.
- Developed Image Understanding PoC system, which consists of several components, namely: Visual Features Extraction, Object Conceptualization, Spatial Relationship Extraction and Scene Conceptualization.
- Assisted in organizing 3 major AI conference in Malaysia from 2010 until 2012.

TechEye Technology Sdn. Bhd.

Aug 2007 - Apr 2010

R&D Software Manager

Responsibilities:

- Involved in Machine Vision business development, products development, customer requirements gathering and analysis, machine and hardware sourcing, technologies development & integration, product delivery and post-sales maintenance.
- Identified potential machine vision solutions and areas of research to improve revenue and business growth, especially in semi-conductor, assembly and test related industries
- Involved in pre-sale, sale and post-sale activities, which include development of customer solution proposal by taking into consideration on customer Total Cost of Ownership and Return-of-Investment factors, closed sale process and payment collection.
- Involved in project scope management, which considers factors of time line, resources, budget, risk, requirement changes, technology feasibilities, product delivery and support
- Led a team of 4 software engineers and hands-on software development tasks in Microsoft Visual .NET C#, incorporated third party image processing SDK, interfaced with electrical & mechanical functionalities of hardware, for in-house machine products development.
- Interfaced with hardware vendors for hardware design and modification, system requirements, system integration, testing, quality control and pricing negotiation
- Involved in software and system architecture design, which involves integration with automation system and various types of hardware, to achieve rapid prototypes development.
- Involved in software and system architecture design for bio-information portal development, which provides genotyping and health prediction services: www.MyFamilyHealth.com
- Led a team of 4 software engineers and bio-informaticians to work on software development, web design, DNA genotyping and reporting tasks using PHP, Flash and JavaScript technology
- Involved in Perl script development, for genomic data processing and statistical analysis.
- Involved in various web technology development methods and tools, such as: CGI Application Framework, Yahoo UI, JSON, XML, MySQL, CSS, HTML/DHTML/XHTML, AJAX, XML, Selenium automate testing tool, Template toolkit, JavaScript, Flash and etc

Accomplishments:

- Managed and implemented 4 machine vision solutions delivered to industry customers.
- Developed business plans to secured 4 entrepreneur grants awarded by government technology funding agency

Developed [machine vision solutions](#) and products:

- [EVerify, Electronic Machine Inspection and Verification System](#) (Project awarded entrepreneurship grant by [CRADLE](#) in 2007)
- [ASIS PCB, Advance Stencil Inspection System](#) (Project awarded by pre-seed entrepreneurship grant by [MDEC](#). Product successfully sold to Hakko Sdn. Bhd., www.hakko.com and Ocular Sdn. Bhd. www.ocular.com.my)
- [SZIS, Mobile Super Zooming Inspection System](#). (Solution tested in STATS ChipPAC Malaysia, www.statschippac.com)

- Multiple light sources and camera integrated prototype solution.
- OCR technology in bottling inspection and verification prototype solution.

Technologies researched and developed:

- [TE 8000 – Wafer Stencil Inspection System](#) (Project awarded entrepreneurship grant by [CRADLE](#) in 2008)
- [Robotic Eye In Pipe \(REIP\)](#) (Project awarded entrepreneurship grant by [CRADLE](#) in 2009)
- PC-to-PLC communication (Model: Omron, SYSMAC CS/CJ/CP Series) in controlling various electronic and mechanical devices, i.e. Pneumatic reject system from SMC.
- Software framework in MS. Visual C# .NET for rapid machine vision prototype and product development.

Intel MSC Sdn. Bhd.

Jan 2006 – Aug 2007

Automation Software Engineer (Tech Lead)

Responsibilities:

- Design, development and testing on automation systems for Chip Attach Module (CAM).
- Developed machine software application using Ms. Visual .NET C# language to communicate with machine controllers on manufacturing process and gather equipment status data using SecGem message as transmission protocol.
- Conducted demonstrations and trainings for application owner and end user to ensure proper and smooth systems deliveries.
- Configured Equipment Interface Bridge (EIB) model, which includes writing of SecSimPro+ script, configuring of factory recipe management system, statistical process control system, unit level traceability and etc.

Accomplishment:

- Delivered automation systems for Chip Attach Module (CAM) that meet factory customer expectation in terms of quality, performance and delivery timeline (1½ years).
- Contributed in product design, system designs, technical solutions integration and system architecture documents for several machine controller modules.
- Prepared necessary documents, such as Standard Operating Procedures (SOP), installation guide, troubleshooting guide and training guide.
- Obtained 2 Intel internal awards for innovation idea generation and proposal, entitled:
 - Multilingual IME Key implementation in Roman Character Keyboard.
 - A de-centralized approach to control and sync up the configuration with distributed factory client application.

University of Malaya

Nov 2003 – Dec 2005

Research Assistant / Master Student

- Assisted supervisor in applying and secure a research grant of RM90k, coordinating with software vendors for lab software purchasing and maintenance process.
- Lab project manager for demonstrations in ITEX exhibition year 2004 & 2005, UM 100 years exhibition and Malaysia Research and Education Network (MYREN) road show exhibition in year 2005.
- Conference committee member for “Bio-Medical Informatics: Application in Teaching, Training, Research and Development” held in Dec 2004 at Auditorium University of Malaya.
- Involved in R&D of biological computational systems using 3D medical images (MRI images) as source of information and incorporating biological modeling and simulation techniques.
- Experienced in porting and testing of developed biological computational system model (Human Heart Fiber-Fluid model) to SGI platform operated in IRIX6.5 OS and Onyx super computer made by MIPS with 64 microprocessors located in Multimedia Development Corporation’s (MDC) Virtual Reality Center, Cyberjaya.
- Experienced in porting and generating research results of developed biological computational system in Linux-Cluster High Performance Computing environment and grid computing system architecture.
- Software research and development experiences in for bio-modeling simulation, which includes:
 - Developed cell and tissue biological modeling simulation based on grid computing architecture by adopting Microsoft .NET framework technologies.
 - Developed human cardiac mechanics and blood flow biological simulation system and model based on fiber-fluid computational model and 3D visualization techniques.
 - Developed rule-based human heart fiber architecture reconstruction biological simulation system and model with 3D visualization capability based on C++ and Open-GL graphic technology.

Equisys Solutions

Jan 2003 - Oct 2004

Project Manager / Business Development Manager

- Involved in activities such as enhancing the business operations, increasing profitability and improving customer satisfaction.
- In-charged of company’s business plan and technology R&D strategies development includes of Business Plan drafting, project management, user requirements gathering, solution consultation and risk analysis.
- Coordinated with outsourced software development team which consists of 3 programmers and 1 designer to successfully deliver several projects, including an Online Media Access System for *Filem Negara Malaysia*, Apartment Community web portal system and corporate multimedia presentation development by using Flash technology.
- Developed an Online Multimedia Library & Knowledge Management System as a commercial product.
- Developed a Multi-user and network-based Logistic Dockets Management System.
- Analyzed and designed a new website for Ministry of Health department of Malaysia.
- Partnership with other software vendors in developing a Machine Vision Inspection System, which involves technology such as: Euresys (eVision), JAI CV-50 ½” CCIR b/w camera, Piccolo Pro2 frame grabber, LED ring light and Canon Flatbed Scanner 3000ex.
- Worked as System Analyst for Johnson & Johnson Vision Care Sdn. Bhd. Tasks including:

- Performed design, integration, and modification for company in-house system to meet Sarbanes-Oxley compliance.
- Analyzed and designed business processes, workflows, for e.g. implement new Change Management Control to meet Sarbanes-Oxley compliance.
- Setup, configured and administered MSSQL 7 & 2000 server for achieving tweaking correct database management system access roles in executing scheduled jobs and store procedures.
- Setup and administered MS Visual SourceSafe system for in-house software development and implementation control.

Thomson Multimedia (R & D Center Malaysia)

Mar 2002 - Dec 2002

Software Engineer

- Software applications development using Microsoft Visual C++.
- Developed a search and backup application for video media files using Microsoft Visual C++.
- Developed a multi-users library video indexing system for improving the speed of manual video annotation process based on server-client architecture design.
- Developed prototypes system related to video editing and processing for demonstration purpose.
- Involved in software development and software testing for system applications deployed to [ASTRO](#), one of the world's largest and most advanced all-digital broadcast and production center.

IBM Malaysia Sdn. Bhd.

Jan 2000 - May 2000

Industrial Trainee

Involved in system enhancement and development cycle in PERKESO SIKAP System Upgrade & Small Local Office Services project. I have involved in the following tasks:

- Analysis on PERKESO current business system. | Understand user requirement. | Propose new business workflow for PERKESO business system. | Illustrate proposed decentralization system flows. | Propose solutions for decentralization of SIKAP system. | Get user confirmation on the proposed system. | Assist COBOL programmer in analyzing current system programs. | Design input/output interfaces for new system. | Perform inquiry modules coding COBOL in OS/400 platform. | Perform unit testing on new modules.

Awards

1. Consolation award of 33 hours Hackathon based on government Open Data by MAMPU, 9th-10th Sep 2015
2. Certified ScrumMaster from Scrum Alliance, 11th Jan 2014.
3. Cloudera Certified Developer for Apache Hadoop (CCDH), Exam CCD-410 (CDH4), 13rd Feb 2013.
4. Statement of accomplishment from online self-learning courses @ [Coursera.org](#): Machine Learning, Computing for Data Analysis, Image and Video Processing
5. Gold Medal award of the IPTA Expo 2005, PWTC, 2nd Oct 2005.
6. "Saintis Cemerlang 2005" (Excellent Scientist 2005) awarded by Ministry of Higher Education, 23rd Aug 2005.
7. ITEX Bronze Medal award of the 16th International Invention Innovation Industrial Design & Technology Exhibition 2005 (ITEX 2005), Kuala Lumpur, Malaysia, 19th – 21st May 2005.
8. Gold medal award of the Invention Exhibition of New Invention, Techniques and Products 2005, Geneva, 8th Apr 2005.
9. Others: Certificate of merit for Chinese Chess Competition University of Malaya 1999. Certificate of merit for National Physic Competition Pre-University level 1998.

Patents

1. **A method and system for identifying multiple entities in image.** PCT/MY2013/000255 Jun 19, 2014
<http://www.google.com/patents/WO2014092548A1?cl=de>
2. **Image processing system and method for extracting a spatial relationship between objects in an image.** PCT/MY2013/000251 11 Dec 2013
<https://www.google.com.ar/patents/WO2014092546A1?cl>
3. **A system and method for automated generation of contextual revised knowledge base.** PCT/MY2013/000199 5 Jun 2014
<http://www.google.com.ar/patents/WO2014084712A1?cl=en>
4. **A system and method for dynamic generation of distribution plan for intensive social network analysis (SNA) tasks.** PCT/MY2013/000233
<http://www.google.gm/patents/WO2014092536A1?cl=en>
5. **System and Method for Enhancing Accuracy and Relevancy in Natural Language Query Systems.** PCT/MY2013/000254 Dec 12, 2013
<http://www.google.com/patents/WO2014098561A1?cl=en>

Publication

1. Selvanathan, N., Tan, S. Y., Nagappan, S., M. Sankupellay. "The fiber-fluid model of the human heart". Journal of Science & Technology in the Tropics, vol 1 (1), Jun 2005
2. Tan, S. Y., Selvanathan, N., Nagappan, S. "Non-Invasive Method for Patient-Specific Virtual Heart Based on Fiber-Fluid Model". Journal of Mobile Multimedia, vol 2 (1), 2006
3. Tan, S. Y., Kiu, C. C., Lukose, D. "Evaluating Multiple-Choice Question Generator". In 3rd Semantic Technology and Knowledge Engineering (STAKE 2011), vol. 0295 of Communications in Computer and Information Science (CCIS), UNITEN Putrajaya, Malaysia. (2011)
4. Tan, S. Y., Kiu, C. C., Lukose, D. **Ontology Independent Question Generator** in Demo Proceedings of the 3rd Malaysia Joint Conference on Artificial Intelligence, UNITEN Putrajaya, Malaysia, July 18-22, 2011.
5. Tan, S. Y., Kiu, C. C., Lukose, D. "Ontology Independent Automatic Question Generation and Assessment". (To publish after related patent approved)

6. Tan, S. Y., Bong, C. W., Lukose, D. "**Building Detection with Loosely-Coupled Hybrid Feature Descriptors**". In proceedings of the 12th Pacific Rim International Conference of Artificial Intelligence (PRICAI '12), vol. 7458 of Lecture Notes in Artificial Intelligence, Kuching, Sarawak, Malaysia (2012)
7. Tan, S. Y., Lukose, D. "**Semantic Hybridized Image Features in Visual Diagnostic of Plant Health**". International Symposium on Agriculture Ontology Services (AOS 2012), 3-7 Sep, Sarawak, Kuching, Malaysia (2012)
8. Tan, S. Y., Lukose, Dickson. "**Cognitive Semantic Model for Visual Object Recognition in Image**". In proceedings of International Conference on Multimedia and Signal Processing (CMSP'12), Communications in Computer and Information Science (CCIS), Vol. 346, p.67, 2012
9. Jasbeer, S. S., Tan, S. Y., Lukose, D. "**Learner Personalization using Emotion Analysis based on Facial Expression**". International Workshop on Collaboration and Intelligence in Blended Learning (CIBL 2012), 3-7 Sep, Sarawak, Kuching, Malaysia (2012)
10. Mohamed, B. K., Hamed, H. F., Tan, S. Y., Lukose, D. "**Social Interaction Behavior Improvement System**". The 3rd International Workshop on Empathic Computing (IWECC 2012), 3-7 Sep, Sarawak, Kuching, Malaysia (2012)

White Papers

1. Tan, S. Y., Lai, K. S., Tech Day 2013, HP Global Development Service, (2013). **Website User Navigation Intention Profiling Visual Analytic System**. HP Global IT, Cyberjaya, Malaysia.
2. Tee, M. S., Chen, J., Tan, S. Y., Lai, K. S., Tech Day 2013, HP Global Development Service, (2013). **Point of Sales Product Recommender Solution for Smart Hypermarkets**. HP Global IT, Cyberjaya, Malaysia.
3. Wayne, O., Chen, J., Ang, E. S., Mohd Taufik, A. H., Tan, S. Y., Lai, K. S., Tech Day 2013, HP Global Development Service, (2013). **Understanding Browsing Experience: ClickPath Explorer**. HP Global IT, Cyberjaya, Malaysia.
4. Tan, S. Y., Tee, M. S., Fadzril, M. M., Lai, K. S., Tech Day 2013, HP Global Development Service, (2013). **Competing Product Analyzer (CPA)**. HP Global IT, Cyberjaya, Malaysia.
5. Lim, M., Tan, S. Y., Yong, K. H., Lai, K. S., Tech Day 2013, HP Global Development Service, (2013). **Mining and Dissecting Online Opinions of HP Products**. HP Global IT, Cyberjaya, Malaysia.
6. Mooi, J. S., Leong, A., Tan, S. Y., Lai, K. S., Tech Day 2013, HP Global Development Service, (2013). **Autonomy Making Expert Search Easier**. HP Global IT, Cyberjaya, Malaysia.

Skills

Professional Fields

People Management | Project Management | SAS 9.4 & SAS EM | Big-data Hadoop Technology (Spark, MLlib, Hdfs, Hbase, Hive, Flume, Sqoop, Mahout, Oozie, Map-Reduce, Pig) | Autonomy Software | Machine vision application development in semi-conductor industry | Image Understanding, Image recognition, Signal and Image processing Techniques | Semantic Technology & Knowledge Management: RDF, RDFS, OWL, SKOS, SPIN, JENA, Linked Open Data (LOD), Conceptual Graph (CG) | Machine Learning | Bio-informatics in personal genotype data processing and web services | Biological Computational System, Modeling and Simulation | Virtual reality 3D visualization using Open-GL | High performance computing (Grid Computing Architecture) | Grid programming techniques using Microsoft C# .NET framework | Genetic Algorithm | Graph Theory | Neural Network for pattern recognition and prediction | Fuzzy Logic | Asynchronous Transfer Mode network technology | Natural Language Processing

Technical Skills

Strong programming skills in Microsoft .NET C# (7 years), JAVA (5 years) | Excellent knowledge in C, C++ (6 years), JAVA Swing (3 years), Visual Basic 6 (5 years), Python (2 years), Ms. Visual C++ (2 years), JSP/Tomcat (2 years), Open-GL (2 years), Perl script (1 year), ASP (3 years) | Semantic Technology: TopBraid composer, AllegroGraph server | Knowledge in COM+, DCOM, DLL and J2EE | Knowledge in MS SQL administrator, setup and configuration | Database: MySQL and MS. SQL 2000 | Experience in VB Script, Assembly language, Visual Prolog, MATLAB, and Palm | Familiar with Window 98, 2000, XP, NT, OS400, IRIX 6.5 and Linux OS | Intermediate user to: Photoshop, MS Office, MS Project, SQL, Visio and Lotus Notes | Web technology experience in SOAP UI for web service component testing, JMeter for performance testing, JSON, APACHE server, Yahoo UI, CSS, HTML/DHTML/XHTML, CGI Application Framework, Selenium automated testing tool, JavaScript, AJAX, PHP, XML and etc.

Training Accomplished

PMP | Cloudera Developer Training for Apache Hadoop | Autonomy – IDOL Server Essential 10 | Vertica | QlikView Designer & Developer | Fundamental of Computer Vision with Medical and Video Application | Presentations Alive | Machine Learning Workshop | myTRIZ workshop | Advance Video Analytics and Emerging Video Surveillance | Introduction to Graph Theory | Introduction to UML | UML Design Expert | Business plan clinic | Step up Program for Entrepreneurs | Architecting Enterprise Software | Transform your research into business venture | Getting Start with .NET | ASP.NET | Programming with C# | Machine Learning, Pre-Calculus, Computing for Data Analysis, Image and Video Processing, Computational Photography, Web Intelligence and Big Data, Making Sense of Data, Computing for Data Analysis @ [Coursera.org](https://www.coursera.org)

Big-Data Analytic Related Project:

- [HPE Streaming Real-Time Analytic Platform \(HS-RAP\)](#)

Artificial Intelligent (AI) knowledge with related application samples:

- Genetic Algorithm (GA) In Solving Multi Variants Problem Implemented In Ms. NET C#
- ADALINE TDL Neural Network Simulation In C-Sharp (C#)
- Genetic Algorithm (GA) In Solving Vehicle Routing Problem
- AI 8-puzzle (8 Puzzle) solver
- Dynamic Bandwidth Allocation implementing Neural-Fuzzy (Neural Network + Fuzzy Logic) Technique simulated in JAVA Network Simulator

Language Proficiency

English(Speak=8, Write=8) | Chinese(Speak=10, Write=10),
Bahasa Malaysia (Speak=8, Write=9) | Cantonese | Hokkien

Personal Characteristics

Innovative | Handle pressure well | Fast learner, excellent analytical and problem solving skills | Pleasant interpersonal skills and self-motivated | Outgoing and enjoy meeting people | Enjoy presentation and discussion of new ideas | Love to teach and share

Extra-Curricular Activities

1. Participated in National Big App 2.0 / 33 Hours MAMPU Hackathon 2015, 9th-10th Sep 2015
2. Presenter of white papers publication at HP DS Malaysia Tech Day 2013 event at Cyberjaya, Malaysia, year 2013, 18th Sep
3. Presenter of top paper from HP DS Malaysia in HP-IT CDC Tech Day 2013 event at Shanghai, year 2013, 5th Sep
4. Demo chair for the [Semantic Technology and Knowledge Engineering](#), year 2012
5. Demo chair for the [Artificial Intelligent Demo 2011](#) co-located with the [3rd Malaysian Joint Conference on Artificial Intelligence \(MJCAI 2011\)](#) and the [3rd Semantic Technology and Knowledge Engineering Conference \(STAKE 2011\)](#) at UNITEN Putrajaya Campus, Malaysia.
6. Sponsorship chair for the [Third Malaysian Joint Conference on Artificial Intelligence](#) and [Semantic Technology and Knowledge Engineering](#), year 2011; Review committee for [Artificial Intelligent Tutorial \(AIT\)](#) 2011; Local Organization Committee for [Artificial Intelligence Workshops \(AIW\)](#) 2011.
7. Participated in the entrepreneur-training program: “[Business Plan Clinic](#)” at Mar 2009 and “[Step up Program for Entrepreneurs](#)” at Apr 2009.
8. Participated in the IPTA Research & Development Expo 2005, PWTC, 30th Sep – 2nd Oct 2005.
9. Participated in the “Closed dialogue with deputy minister of health Malaysia”, 23rd Jun 2005.
10. Participated in the 16th International Invention Innovation Industrial Design & Technology Exhibition 2005 (ITEX 2005), Kuala Lumpur, Malaysia, 19th - 21st May 2005.
11. Participated in the MSC-Technopreneur Development Seminar & Workshop, 31st May 2004.
12. Represented University Of Malaya in the ACM International Collegiate Programming Contest, Asia Region Contest held in Hong Kong in October 2000.
13. Positioned as the Marketing officer, The Grand Asia Chess Challenge 4 project, 1999/2000.
14. Others: Member, Student Library Committee, 1997/1998. Member, Sixth Form Society, 1997/1998. Participated in National Physic Competition Pre-University level, 1998. Participated in Inter-School Mathematics Quiz in the State of Penang, 1996. Adviser of Physics Department, School Science Society, 1996. Vice-Chairman, School English Language Society, 1996. Chief of Education Department, School Inventor’s Club, 1995. Head of Physic Department, School Science Society, 1995. Member, School JUDO Club, 1992-1996.

References

To be provided upon request.