



Company Profile



Introduction

ATAS was founded by in 2018, by our team and RenalTeam, which is also a subsidiary company of RenalTeam. We focus on providing consultation and other services relating to information technology solutions, automation and system integration in oil & gas, petrochemical, chemical, refinery, food and beverage, water treatment, manufacturing and healthcare industries.

Our team has many years of experiences in providing industrial, control and automation system solutions, electrical & instrumentation installation and consultation, engineering equipment supply, site support and maintenance services to provide integrated engineering solutions, especially in oil & gas industry.

In view of Malaysia's aim to be Industry 4.0 hub in Southeast Asia and Malaysia's aggressiveness in the adoption of new technologies, we aim to help enable it at big way with other automation companies in the market. One of our objectives is to drive manufacturing forward – to be faster, more efficient, and customer-centric while pushing beyond automation and optimisation to discover new business opportunities and models. By embedding modern technology into businesses, we essentially achieve Industry 4.0 objectives.

We help in enabling our clients to integrate and embed intelligence in manufacturing processes facilitating Industry 4.0 principles with one source of real-time information. For example, in our recent project, we assisted our clients in their efforts to efficiently and effectively manage their supply chain e.g., inventory management. We have deployed our hardware and system to promote real-time inventory management, including reporting, automation, configurable notifications and customisation for uncommon process and work flow. We performed detailed diagnostic on our clients' existing inventory system and workflow, and provided recommendations in terms of improvements required including hardware and software. Our solutions involve usage of smart sensors such as RFID smart sensors, other technology and Internet of Things ("IoT") oriented that promote real-time visibility, complemented by cloud services for remote users. Our system integration services include applications ("apps") development, data science and artificial intelligence implementation.

We are hoping to bring our experienced team to deliver services to you in a seamless manner and integrity oriented in Malaysia and across the region.



ATAS solutions

ATAS solutions are based on:

- Tailored approach – emphasis on assessing the business requirements, operational feasibility and co-developing the right solutions
- Compliance to the international standards as per FDS (Functional Design Specification) or SoW (Scope of Work)
- A standard procedural workflow for consistent and accurate completion of tasks
- Extensive experiences from different industries and applications i.e., oil & gas industry, water treatment industry, and general industry
- End user specific requirement

includes:

- Technical expertise in Human Machine Interface (HMI), PLC (Programmable Logic Control), Touchscreen configuration, integration of the instruments, E&I including control panel design, and IoT implementation for cloud services
- Certified test equipment
- Professional services and support after sales
- Customer support via email/call, remote troubleshooting, and on-site support

In our projects we are specialised for design and use of:

- Engineering for the complete control & measurement system (Oil and gas standards compliances)
- HMI design and development (Schneider Electric Citect, GE iFix, GE Cimplicity, and others)
- PLC design and development (AB, Schneider Electric Scadapack, Omron, and others)
- Flow computer S600+ config design and development
- Loop drawing design including analog I/O, digital I/O, and frequency I/O integration and testing.
- Communication and integration with other system and instruments
- Telemetry / remote data communication including IoT devices and internet gateway
- Cloud services configuration that include web hosting and cloud data storage (AWS)
- Data analysis on the collected data using Data Science
- Implementation of the new features based on the result from the DS model
- Any other hardware integration into our system via serial communication, network communication, wireless communication with different protocol i.e. IEEE Modbus, OPC UA, OPC DA, JSON string, buffer array, and etc.

Our key service - Automation

Industrial automation solutions

Our Automation Solutions offer turnkey integrated Industrial Automation Solutions starting from the plant floor (PLC/HMI, SCADA) and continuing up to the Manufacturing Information Systems (MIS). This helps us enable our clients in optimising their process in return achieving the highest level of efficiency by maximising system availability and minimising system downtime, at the same time maintaining upper level supervision and real-time monitoring offering the followings:

1. Metering System (Upstream & Downstream)

- Allocation & Custody (Metering System, Sampling System, MPFM)
- System engineering and system commissioning – HMI, PLC, and Flow Computer
- Engineering design: Oil and gas standards
- Flow computer Integrity & Inspection service
- Prevention and corrective system maintenance
- System Engineering, Maintenance & Service of MPFM
- Engineering troubleshooting

2. General Industry

- Engineering design with instruments integration.
- Telemetry / remote data communication using IoT devices and Internet Gateway
- PLC and HMI Design and development
- Internet gateway (IoT) implementation for remote real-time monitoring & control
- Integration of Analog I/O, Digital I/O, Frequency I/O, and other signals.
- Integration of RFID solutions
- Web hosting and cloud data storage for real-time remote monitoring and accurate periodical reporting
- Inventory Management for retails, wholesales, and medical sectors

3. IT Services & IoT Solutions (RFID Solutions & Others)

- Consultation on existing system upgrade
- Provide IT solutions includes software development, apps development, and cloud-based solutions.
- System integration with existing system
- Existing and new hardware integration for IoT Solutions
- Implementation of AI & DS solutions



Our mission, vision, objectives and HSE policy

Mission

- To uphold our philosophy of exceed customers' requirements through excellent products and supports focused on customer satisfaction with our teamwork, professionalism and commitment.
- To generate a team of engineers and data scientists with distinctive knowledge of process automation and field instruments to fulfill our customer requirements.
- To deliver well-engineered Automation Solutions and Remote Monitoring Systems that enable our customers to achieve their production targets remotely, efficiently and effectively and aspire to attain ultimate customer satisfaction.

Vision

- To become one of the pioneers in designing, engineering, and implementing solutions for the automation aligned with IR4.0.
- To be the system integrator of choice of our customers in terms of technical capability, reliability and professionalism.
- To be a part of the team during the engineering and development phase in clients' future projects.

Objective

- To be able to exceed the minimum requirement of client's requirement and expectation
- To be able to deliver a stable solutions with room for future improvements
- To be able to provide prompt technical support and additional educational services to the clients

Health, Safety & Environment Policy Statement

- ATAS upholds its role as a responsible corporate citizen committed to the cause of Health, Safety and Environment ("HSE") for the interest and protection of employees, society and the environment.
- ATAS recognises the importance of working closely with our customers, contractors and employees to achieve the best possible HSE record.

ATAS team

The team

As we take clients' satisfaction as our main priority, we segregate our responsibilities and duties to deliver desired results to our valued clients.

Our team is led by Lai Kuan Wai, the general manager and a multi-disciplinary team of professionals with deep experience in their area of specialisation. He will oversee all of our clients' requirements and be accountable for the quality of our services.

He is supported by Chea Chee Chung, the site manager who will be responsible for the overall co-ordination of work/projects, and together, Kuan Wai and Chee Chung are our clients' single point of contact.

Our services will be designed, implemented and delivered to our clients by Lim Chi Dick and his team. He and the team will handle most of the technical aspects of the project.

In addition to that, Kuan Wai, Chee Chung and Chi Dick are offshore competent, complies to the HSE requirements of local and international offshore companies, and familiar with End-User HSE and Permit-to-Work (PTW) system. This ensures customers' work are done with minimal hassle as Safety aspects in large plants or offshore installations are always high in standard. They have various overseas experience as in support of O&G industries in Thailand, Vietnam, Myanmar, and such also ensures our staff are culturally sensitive.

Our team has a collaboration advisor, Dr. Kenneth Teo, who will be responsible to provide both consultation on the related projects and researches. His involvement provides invaluable insights especially on the improvement of the existing projects and future projects.

We work closely together with our business partners, our support extends to sales oriented activities on behalf of our partners, such as end-user presentations, sales meetings, technical and bid clarification meetings as well as site surveys.



ATAS team – Lai Kuan Wai

Background

Kuan Wai is the General Manager of ATAS. Previously he has been involved in oil & gas and other general industries i.e., manufacturing, water treatment, with experience in the SCADA system, Instrumentation, Automation System and Programmable Logic Control since 2007.

Selected Experiences

- Coordinate with the team to provide services, support, periodic maintenance and training for metering system and products to various customer including PTTEP, Petronas Carigali, Exxon Mobil, Shell, Hibiscus, Sapura Energy, Nippon Oil, Repsol, Transwater API, Kaazam Energy, Interlinx and Darco Water.
- Involved in project management and job integration for metering projects:
 - PTTEP – Enhancement on the existing metering system particularly on the sampling system under the supervision of Saravanakumar Veerasinghan.
 - Exxon Mobil – New metering system for offshore integrated platform Tapis-Enhance Oil Recovery. The system includes two metering skids with sampling systems.
 - Petronas Carigali – Batch loading system development and implementation for crude oil terminal, Terengganu Crude Oil Terminal and Onshore Gas Terminal, OGT.
- Involved in project management and system design for multi-phase flow metering projects:
 - Petronas Carigali – New installation of MPFM skids for Betty, J4 and Dulang
 - Petronas Carigali Vietnam – New installation of MPFM skids for Pearl, Topaz, Ruby and Diamond.
 - Repsol – New installation of MPFM skids for BRB, BKC, BRC, BTA and BSA.
- Provide SCADA system for water treatment system in Infineon, Melaka.
- Personally developed both HMI and PLC program for all of the Accuflow MPFM installation.
- Engineering, development, procurement, and management for the inventory management for a dialysis centre using RFID solutions.



ATAS team – Gan Kim Soon

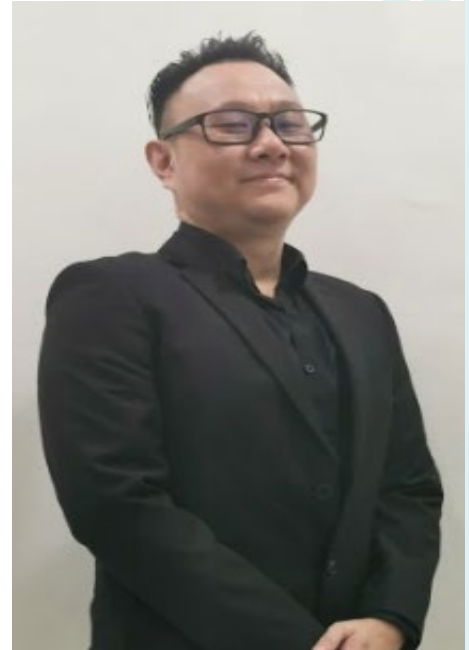
Ph.D., M.Sc., B.Sc(Hons)

Background

Kim Soon is the HOD of the IT Department of ATAS. Previously, he has been involved in R&D and IT development projects in Universiti Malaysia Sabah, particularly in artificial intelligence, machine learning, soft computing, semantic web technologies, agent technology, e-commerce, stock market prediction, image processing and supply chain system. Currently, Kim Soon is a PhD graduate.

Selected Experiences

- Involved in some of R&D projects as follows:
 - Developing Bidders and Sellers Strategy for Multiple Online Auctions
 - Development semantic agent framework
 - Development of Semantic Meta-Search Engine Project
 - Agent Communication Language with Semantic Web Technology for Interoperable Communication
- Involved in some development projects as follows:
 - Microsoft Office Application Monitoring and Backup Agent
 - Bibliography System Development using Hybrid Automated Entity Extraction and Semantic Technology
 - Robust Crawler for World Wide Web for Informational Retrieval
 - Center of Excellence in Semantic Agent web site development
 - Development of Generic Bio-Inspired Neural Tool
- Involved in some internal and external lecturing and special trainings as follows:
 - Programming subjects: C, Java, Web Programming (HTML, CSS, PHP, MYSQL)
 - AI subjects: Intelligent agents



ATAS team – Gan Kim Soon

Ph.D., M.Sc., B.Sc(Hons)

Selected Research Publication as Principal Author (PA)

- Comparison of Simple Feed Forward Neural Network, Recurrent Neural Network and Ensemble Neural Networks in Phishing Detection
- Comparison of Ensemble Simple Feedforward Neural Network and Deep Learning Neural Network on Phishing Detection (pp. 595-604)
- Enforcing Social Semantic in FIPA-ACL Using SPIN (pp. 3-13)
- A Review on Agent Communication Language (pp. 481-491)
- Homogeneous Ensemble Feed Forward Neural Network in CIMB Stock Price Forecasting (pp. 1-6)
- A CIMB Stock Price Prediction Case Study with Feedforward Neural Network and Recurrent Neural Network
- BioGenTool: A Generic Bio-Inspired Neural Tool (pp. 1532–1537)
- External Constraints of Neural Cognition for CIMB Stock Closing Price Prediction
- A FIPA-ACL Ontology in Enhancing Interoperability Multi-agent Communication
- DBPedia Based Meta Search Engine
- Agent Architecture: An Overviews
- A comparison of distance methods effectiveness in retrieving relevant articles in agricultural domain. (pp. 1-7)
- A robust framework for web information extraction and retrieval
- Ontology-based query expansion for supporting information retrieval in agriculture. In The 8th International Conference on Knowledge Management in Organizations (pp. 299-311)
- A review of stock market prediction with Artificial neural network (ANN) (pp. 477-482)
- Self-synthesized controllers for tower defense game using genetic programming (pp. 487-492)
- A comparison on the performance of crossover techniques in video game (pp. 493-498)
- Document categorizer agent based on ACM hierarchy (pp. 386-391)
- Performance of Varying Genetic Algorithm Techniques in Online Auction (pp. 263-290)
- Searching for the Effective Bidding Strategy Using Parameter Tuning in Genetic Algorithm (pp. 203-228)
- . Searching for the Effective Bidding Strategy Using Parameter Tuning in Genetic Algorithm (pp. 203-228)
- Deterministic versus Traditional Genetic Algorithm in Optimizing Bidding Strategies (, pp. 38-48)
- Deterministic Dynamic Adaptation Genetic Algorithm in Evolving Auction Bidding Strategies (pp. 152-158)
- Comparing the performance of deterministic dynamic adaptation GA and self-adaptive GA in online auctions environment (pp. 1393-1398)

ATAS team – Chea Chee Chung

Background

Chee Chung is the manager of ATAS. Previously, he has been involved in oil & gas and other general industries i.e., manufacturing, water treatment, semi-conductor, mining, with experiences in the Human Machine Interface (“HMI”) system, supervisory control and data acquisition (“SCADA”) system and Flow Computers (“FC”) since 2007.

Selected Experiences

- Involved in services, support, periodic maintenance and training of metering system and products to various customer including PCSB, PCML, PCVL, EMEPMI, SHELL, Newfield, Sapura Kencana, Murphy, Nippon Oil, Talisman, Repsol, etc.
- Involved in project management and job execution for metering systems upgrade:
 - Murphy Oil - Kikeh FPSO HMI Metering system upgrade & Development of new Sampling system; which included configuration of HMI using Citect, S600+ FC logicalc and OPC to DCS system
 - Shell - Gumusut Kakap HMI Metering system upgrade; which included configuration of HMI using Citect, testing and on-site troubleshooting
 - Petronas Carigali – such as Resak Platform & Bekok-C Platform; HMI Metering system upgrade; which included configuration of redundancy system using Citect.
- Involved in project management and jobs execution for batch loading systems upgrade and truck loading systems upgrade
- Involved in system modifications for general industries sector such as OSRAM, BHP North Port Klang, Penjom Gold Mine, etc.



ATAS team – Lim Chi Dick

Background

Chi Dick is a Senior Engineer in ATAS. Previously he has been involved in oil & gas and other general industries i.e., manufacturing, water treatment, semi-conductor, mining, with experience in the SCADA system, Instrumentation, Automation System and PLC since 2012. Chi Dick is currently a member of Board of Engineering Malaysia.

Selected Experiences

- Provide services, support, periodic maintenance and training for metering system and products to various customer including PTTEP, PETRONAS, EXXON MOBIL, SHELL, HIBISCUS, SAPURA, NIPPON OIL, TALISMAN, REPSOL, etc.
- Involved in Project management and job Integration for metering projects:
 - Exxon Mobil – automated Validation System development and implementation for all Exxon Platform such as GUD, GUE, TAPIS, etc and new gas line installation with Coriolis Meter, Flow Computer, HMI for GUD,GUA, IBA, etc.
 - SHELL – batch loading system development and implementation for all Crude Oil Terminal for SHELL Facilities such as LCOT, BCOT
- Involved in Malaysia largest crude oil production, Platform Gumusut Kakap, first oil project to provide metering system for clients
- Provide multi phase metering system for PETRONAS for well head performance check
- Provide SCADA system for Penjom Gold Mine to monitor, control and maintain of production and plant Process



ATAS Advisor

Kenneth Teo Tze Kin

Ph.D., M.Sc., B.Eng., MIEEE, BEM, IEM

Background

Dr. Kenneth Teo Tze Kin is the Collaboration Advisor of ATAS. Supported by the *Sabah State Government Scholarship Award*, he graduated 1997 from Leicester University, Leicester, United Kingdom with *First-Class Honours* in *B.Eng. of Electrical and Electronic Engineering*. Joined *Universiti Malaysia Sabah (UMS)* as a part-time tutor and research officer in 1999 before being appointed as a *Full Time Lecturer* in 2003. With both his *M.Sc.* and *Ph.D.* degrees (specialized in *Precision Optimization & Artificial Intelligence*) obtained from UMS, Dr. Kenneth currently serves as a *Senior Lecturer & Researcher* at *Faculty of Engineering, UMS*.



References

- <https://ums.academia.edu/KennethTeo>
- <https://msclab.wordpress.com/>

Selected Experiences

- Achieved "UMS 2013 Best Supervisor" with more than 20 postgraduates and candidates who were pursuing PhD. And M.Eng.
- Published 23 international journals, 76 Scopus-indexed proceedings as principal author with overall of 139 papers up-to-date. His effort is publication received "IEEE 2012 Best Paper Award" in Penang, Malaysia and "IEEE 2013 Merit Award" in Shenzhen, China.
- Received more than one hundred major innovation awards, including 12 gold medals at international event.
- Had 5 patent filing at national level and received a recognition of "2013 iENA Gold Medal" in Nurnberg, Germany.
- Pioneered the Modelling, Simulation & Computing Laboratory (mscLab) founded in 2009. His team had evolved from 3C: Computation, Communication & Control towards PC: Precision Computing supported by Artificial Intelligence especially in the area of Evolutionary Computation, Deep Learning & Semantic Agent.
- Appointed as the Head of Artificial Intelligence Research Unit (AiRU) by UMS since 2018 as well as the Head of Electrical & Electronic Engineering Program (HK02) and Advisor of IEEE Student Branch (UMS) since 2019.

ATAS Advisor

Kenneth Teo Tze Kin

Ph.D., M.Sc., B.Eng., MIEEE, BEM, IEM

Main principal investigator in funding & author with Scopus indexed publication

1. Artificial Intelligence in Smart Energy: **Renewable Energy**

- Self-Adaptable Genetic Algorithm based Fuzzy Optimizer for Maximizing the Utilization of Reflected Radiation in Solar PV Arrays
- Particle Swarm Optimization based Maximum Power Point Tracking for Partially Shaded Photovoltaic Arrays, vol. 17, no. 34(1), pp. 20.1-20.7.
- Maximum Power Point Tracking for PV Array Under Partially Shaded Conditions, pp. 72-77. (Scopus citation: 37)

2. Artificial Intelligence in Intelligent Transportation: **Traffic Optimization**

- Feasibility Study of Hybrid Traffic Management Architecture with Multi-Agent System in Urban Traffic Network Optimization
- Agent-based Optimization for Multiple Signalized Intersections using Q-learning, vol. 15, no. 6, pp. 90-96.
- Optimization of Traffic Flow within an Urban Traffic Light Intersection with Genetic Algorithm, pp. 172-177. (Scopus citation: 31)

3. Artificial Intelligence in Intelligent Transportation: **Vehicular Communication**

- Formulating A Novel Fitness Function of Hybrid GA-PSO Based Network Coding For Vehicular Ad-Hoc Network
- Exploration of Genetic Algorithm in Network Coding for Wireless Sensor Networks, vol. 15, no. 6, pp. 83-89.
- Energy Efficient Clustering Algorithm in Wireless Sensor Networks using Fuzzy Logic Control, pp. 392-397. (Scopus citation: 24)

4. Artificial Intelligence in Intelligent Transportation: **Machine Vision**

- Feasibility Study of Employing Manifold Learning and Markov Chain Monte Carlo Data Association in Video Surveillance Parking Management System
- Trajectory Pattern Mining via Clustering based on Similarity Function for Transportation Surveillance, vol. 17, no. 34(1), pp. 19.1-19.7.
- Image Segmentation via Normalised Cuts and Clustering Algorithm, pp. 430-435. (Scopus citation: 23)

5. Artificial Intelligence in Precision Automation: **Process Manufacturing**

- An Extended Adaptive Fuzzy Logic Mechanism in Partially Simulated Chemical Reactor System with Unsupervised Learning Algorithm
- Q-learning based Controller for Fed-Batch Yeast Fermentation, Chapter 28, pp. 219-225
- Genetic Algorithm based PID Optimization in Batch Process Control, pp. 162-167. (Scopus citation: 18)

Our Partners, Main Cons, and Endusers

Partners

- **Renalworks Pte Ltd** - <http://www.renalworks.io/>
- **TKG Engineering (M) Sdn Bhd** - <http://www.tkg.my/>
- **LT Borneo Sdn Bhd** - <http://ltborneo.com/>
- **DNVGL Malaysia Sdn Bhd** - <https://www.dnvgl.my/>
- **Interlinx Sdn Bhd** - <http://www.interlinx.com.my/>
- **Universiti Malaysia Sabah** - <https://www.ums.edu.my/v5/en>

Main Con

- **SGS Malaysia Sdn Bhd** - <https://www.sgs.my/>
- **OGPC Sdn Bhd** - <http://www.ogpc.com.my/>
- **Transwater API Sdn Bhd** - <http://www.transwater.com.my/>
- **Kaazam Energy Sdn Bhd** - <http://kaazam.com.my/>

Endusers

- **PTTEP** - <https://www.pttep.com/en/Home.aspx>
- **RenalTeam Pte Ltd** - <https://renalteam.org/en/>
- **Sapura Energy Berhad** - <https://sapuraenergy.com/>
- **Hibiscus Petroleum Berhad** - <https://www.hibiscuspetroleum.com/>
- **Petrovietnam Exploration Production (PVEP)** - <http://www.pvep.com.vn/en>

Recent and ongoing projects

Feb 2019 – June 2019

Cloud-based Inventory Management for Dialysis Centre (RFID Solutions integrated)

June 2019 – July 2019

Remote real-time Inventory for RFID Cabinet

July 2019 – Sept 2019

PLC and TouchScreen Engineering for the Water Treatment

Nov 2019 – June 2020 (Estimation)

RIMS Mobile Adapter – Internet gateway for live data display and data streaming to cloud data storage

Dec 2019 – Jan 2020

IP & SNP Kikeh Metering – Integration of Upgraded OWM+C in the Metering System

Dec 2019 – Feb 2020

IP & SNP Kikeh Metering – Integration of the Sampling Pump Management in the Metering System

Dec 2019 – June 2020 (Estimation)

IP & SNP Kikeh Metering - Sampling Improvement Phase 2

Recognition



Recognition



Transwater API Sdn Bhd

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1st Dec 2019

TO WHO IT MAY CONCERN

PROJECT: SNP System Improvement for Sampling & HMI (PTTEP)

SUBJECT: LETTER OF SUPPORT FOR FLOW COMPUTER SYSTEMS

Transwater API Sdn Bhd is the Exclusive Agent for **Floboss S600+ Flow Computer** Software, Hardware and Systems Solution in Malaysia. We provide solutions in **Floboss S600+ Flow Computer** applications and full product and technical support to customers.

Transwater API Sdn Bhd is also the exclusive and authorized representative to propose **CitectSCADA HMI** Software for the Oil & Gas industry and provides total (both engineered and integrated) solutions in all **Citect** applications, full product and technical support to customers.

We hereby confirm that **Ascertain Tech Automation & Solutions Sdn Bhd** (hereafter known as **ATAS**) will receive full support from **Transwater API Sdn Bhd** for this tender exercise and assures our respective customer that we shall work with **ATAS** to ensure performance and workability of the **Floboss S600+ Flow Computer System** and **CitectSCADA HMI** as proposed.

However, **ATAS** must NOT commit and agree on behalf of **Transwater API Sdn Bhd** without prior consent from **Transwater API Sdn Bhd's** personnel.

Yours Sincerely,

Transwater API Sdn Bhd

Mohd Hakim Haji Samsuri
Assistant Sales Manager, RAS

Contact us

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