

SIAA QUARTERLY NEWSLETTER

APR 2020 EDITION



IN THIS ISSUE

- > TraceTogether : mobile app to boost COVID-19 contact tracing efforts
- EMERGE STRONGER as a Business: Committee of Supply (COS) Debate 2020
- > Anomaly detection by AI analytics
- Cleaning robots deployed at Jewel Changi
 Airport with grant support
- > Join ITE as Part-time Adjunct Lecturers during this outbreak

- Singapore's 2nd Economic Stimulus
 Package: How would you benefit it for your business?
- Singapore Al Strategy
- > How to Grow your Business with Collaborative Applications
- Singapore Pavilion 2020/2021
- > Free online course on understanding Covid-19 launched

MEET OUR NEW CORPORATE MEMBERS Welcome to the SIAA community !





NEC Asia Pacific Pte Ltd





<u>OnRobot Singapore</u> <u>Pte Ltd</u>





<u>ROS Industrial</u> <u>Consortium Asia</u> Pacific



<u>Murr Asia-Pacific</u> <u>Pte Ltd</u>

T€CH<mark>SΩURC€</mark>

Techsource Systems Pte Ltd





TRACETOGETHER : MOBILE APP TO BOOST COVID-19 CONTACT TRACING EFFORTS

TraceTogether



Share the app with your family and friends today!

TraceTogether. Download it now! For more info, visit https://www.tracetogether.gov.sg/

To help support current nationwide contact tracing efforts, Govtech, together with MOH, have developed a mobile app called



SINGAPORE'S 2ND ECONOMIC **STIMULUS PACKAGE: HOW WOULD YOU BENEFIT IT FOR YOUR BUSINESS?**

The Resilience Budget announced on 26 Mar by Deputy Prime Minister and Minister for Finance Heng Swee Keat will support workers, businesses and household through this challenging time of COVID-19 pandemic.

The Resilience Budget announced on 26 Mar by Deputy Prime Minister and Minister for Finance Heng Swee Keat will support workers, businesses and household through this challenging time of COVID-19 pandemic. It is an unprecedented crisis of a highly complex nature. In economic terms alone, this will likely be the worst economic contraction since Singapore's independence. This extraordinary situation calls for extraordinary measures. This supplementary budget is over \$48 billion, and has enhancements to support:

- Workers and Protecting Livelihoods 1.
- 2. Self Employed Persons and Families
- 3. **Businesses**
- 4 Affected Sectors namely Aviation, Tourism, Food Service, Land Transport and Arts & Culture

For More Information :

- Resilience Budget Booklet
- Infographic
- Budget 2020 at a Glance
- Stabilisation and Support Package

Source: MOF & ESG

EMERGE STRONGER AS A BUSINESS: COMMITTEE OF SUPPLY (COS) **DEBATE 2020**





The global economy is undergoing a difficult time. Factors like the US-China trade war, Brexit and rising protectionist sentiments globally have contributed to this. The global outbreak of the COVID-19 is a current concern.

Singapore businesses are feeling the impact and are understandably concerned. The immediate priority is to help businesses overcome the immediate challenges, while helping them to emerge stronger in the long-term. MTI will focus on four key economic strategies -Stronger Globally, Stronger through Innovation, Stronger through Transformation and Stronger Together.

Source: MTI





SINGAPORE AI STRATEGY



The National Artificial Intelligence (AI) Strategy is a key step in Singapore Smart Nation journey. It spells out Singapore's plans to deepen our use of AI technologies to transform our economy, going beyond just adopting technology, to fundamentally rethinking business models and making deep changes to reap productivity gains and create new areas of growth.

There are 5 National AI Projects identified in transport and logistics, smart cities and estates, healthcare, education, and safety and security, where AI technologies will be used to address key challenges and deliver strong social and/or economic impact for Singapore and Singaporeans. The National AI strategy also outlines five key enablers to anchor a vibrant and sustainable AI ecosystem, to drive AI innovation and adoption across the economy. Full details of the strategy <u>here</u>

Source: Smart Nation and Digital Government Office

CONTRIBUTIONS FROM MEMBERS

ANOMALY DETECTION BY AI ANALYTICS



There are increased needs for the application of products and services associated with AI utilization to address challenges in the world today. In the world of manufacturing, failures have real world consequences, and can mean high-profile recalls, dissatisfied customers, and damage to a hard-earned reputation. The conventional approach of quality control and manual reviews by highly trained and qualified inspectors often faces challenges like, product inconsistency, high cost of inspector turnover and required trainings, human unreliability, speed issues, and, ultimately, customer confidence issues. AI utilization can offer manufacturers a certain level of assurance in failure detection.

Usually, to detect anomalies, sensors are used, such as those that pick up vibrations, and those that check pressure or temperature.

م و

1, 1,

Users will then monitor the site by looking at observation data from these sensors. Normally, anomaly detection rules are set for each sensor, with "threshold values" being used to determine the presence of an anomaly when data values go above or below a certain level. However, the more complex a system gets, the more complicated the rules and data points become.

Today, AI has already made it possible for factories and industries to operate more efficiently than ever before, by using AI-based analytics technology that is able to analyse vast quantities of sensor data to find anomalies.

Read more about such technologies here





HOW TO GROW YOUR BUSINESS WITH COLLABORATIVE APPLICATIONS



With the dawn of smarter, more adaptive tooling, robots can now function with greater speed, strength, safety and precision, accomplishing a wide range of tasks, while maximizing ROI. Collaborative robots, often called "cobots", offer opportunities for companies of almost any size to cost-effectively automate processes that were previously out of reach. The innovation occurring around EoATs is enabling manufacturers to deploy robotic technology in new ways and gain new advantages.

Collaborative applications and EoATs such as grippers, sensors, and tool changers have become critical elements in the success of collaborative applications such as machine tending and packaging. The more manufacturers understand their EoAT options, the greater the return they will see in output, quality, and profitability

The OnRobot product range features a wide assortment of tools for collaborative applications, including: two and three-finger grippers, force/torque sensors, vacuum grippers, the award-winning Gecko Gripper, and tool changers. This new combination of offerings makes it quicker and simpler to automate tasks such as packaging, quality control, materials handling, machine tending, pick & place, assembly, and surface finishing.

Learn how you can enable faster production at lower cost by downloading this free eBook here.

CLEANING ROBOTS DEPLOYED AT JEWEL CHANGI AIRPORT WITH GRANT SUPPORT

Gaussian Robotics is proud to announce that our cleaning robots won the recent public tender held by Jewel Changi Airport. Jewel bought six of our flagship robots called ECOBOT Scrub 75 Pro, with the support from the Productivity Solutions Grant (PSG) and they have been in use in the mall for the last few months. Jewel's stringent requirements for cleaning quality and safety standards for autonomous cleaning robots are among the highest in the world and similar to Changi Airport where our ECOBOTs are also in use at Terminal 2, 3 and 4.

With the recent extension of the \$30 million PSG, we believe it will help more companies adopt autonomous cleaning robots, allowing them to automate floor cleaning duties to increase productivity and make it safer for cleaners during this period of COVID19. Firms will now have up till Feb 28, 2021, to apply for the grant that helps them buy proven environmentally services technology like Gaussian Robotics.

For more information, please refer to <u>www.nea.gov.sg/industry-</u> transformation-map/productivity-solutions-grant-(psg)













SINGAPORE PAVILION 2020/2021

SIAA has applied for the LEAD IFM grant scheme from Enterprise Singapore to support trade exhibitions in FY2020, grant results is pending approval from Enterprise Singapore. LEAD International Fairs & Mission¬s (LEAD IFM) replaces International Marketing Activities Programme (iMAP) from 1 October 2019 onwards with <u>funding up to 70% of participation costs for eligible companies.</u>

Join our Singapore Pavilions if you are looking for new markets or to update your overseas customers with your latest products and services.

Get in touch with us at secretariat@siaa.org for more information!



JOIN ITE AS PART-TIME ADJUNCT LECTURERS DURING THIS OUTBREAK

In view of the current economic situation, ITE College, School of Engineering is inviting SIAA members' employees to join them as an Adjunct Lecturer. This is an initiative to reach out to help the companies and their staff tide through this difficult economic period. Applicants will provide teaching service and other related academic services such as setting and marking of examination papers for Higher Nitec, Nitec and ITE Skills Certificate (ISC) courses. Assignment can be during weekdays, evenings and/or weekends.

Speciality: Artificial Intelligence, Automation and Advanced Manufacturing , Cyber Security , Data Analytics , IIoT i4.0, Mechanical Technology, Mechatronics, Operational and Information Technology, Precision Engineering and Robotics.

Closing date for application : 28 May 2020

<u>Apply online</u> or contact Mr Thong Kah Mun (College Central only) at thong_kah_mun@ite.edu.sg







FREE ONLINE COURSE ON UNDERSTANDING COVID-19 LAUNCHED

On 11 Mar 2020, Gnowbe, a micro-learning platform and Ngee Ann Polytechnic launched a course on Covid-19 - Infection Control and Prevention 101. Members of the public can access the course for free on Gnowbe's website. The course aims to help people understand the coronavirus infection, how it is spread, and how to prevent it from spreading. Learn online <u>now!</u>

GET TO KNOW SOME OF OUR MEMBERS A LITTLE BIT MORE



At Gaussian Robotics, we set out to redefine cleaning with autonomous technology. Our class-leading robots help to automate floor cleaning tasks to greatly improve productivity and performance while operating in a safe and careful manner. Today, our cleaning robots are used globally in over 18 countries in the commercial and industrial sector. Our Ecobot Scrub 50 was co-developed with JTC, encompassing the latest in navigation and safety and is one of the first in the world to be able to take a lift, discharge grey water and refill clean water all by itself.

We believe in constant innovation and we practice it every single day with a highly energetic team who works passionately to refine how cleaning should be for the whole industry. You can reach us at <u>sales@gaussianrobotics.com</u> for further information.



IHI Asia Pacific Pte Ltd established the Singapore branch office in 1963 and is currently the regional headquarters of IHI in Asia, with the mission to provide the conduit to connect the IHI Group to business opportunities in the Asia Pacific market.

Today, IHI has extensive involvement in the design, manufacture and construction of Power Systems and Processing Plants, Heavy Industrial and Mass Produced Machinery, Materials Handling Equipment, Ship Building and Offshore Marine Structures, Steel Structures, Aero Engines and Rocket Systems.



Midsouth Automation, specializes in designing and manufacturing of customized automation machines for the assembly of a wide range of electrical products from product development to full production including packaging and warehouse or logistics automation. Also, provide consultation for streamline the production process of its customers that enable World Class Manufacturing.

The team adhere to stringent process of design and development to achieve optimized productivity to provide both high-quality products and cost-effective manufacturing solutions for all our clients. We believe and strive for strong collaboration and partnership with established companies for long-term growth and success together with our valued customers. We are ready to lead you into the future of manufacturing.



Murrelektronik is a global leader in the development, manufacture and distribution of automation solutions. Our products can be divided into four core lines: Power Supplies and Control, Interfaces, Cables/Connectors and IO Systems. Our high-quality, innovative products and focus on market requirements sets us apart from the crowd. Our customeroriented approach ensures our tailored solutions make your applications better.





GET TO KNOW SOME OF OUR MEMBERS A LITTLE BIT MORE

Orchestrating a brighter world



Singapore-based NEC Asia Pacific (NEC APAC) is the regional headquarters for NEC Corporation (HQ: Japan) in the Asia Pacific region (South and Southeast Asia). As a leading information and communications technology provider, NEC APAC provides innovative solutions and infrastructure to promote safety, security and enhance the quality of life for individuals and the community.

NEC APAC's expertise includes solutions for carrier networks, biometric identification, enterprise applications and infrastructure, unified communications, transportation solutions, multimedia displays and smart energy, as well as the provision of managed services and contact centre services.

Together with our research laboratories, NEC APAC provides cutting-edge public safety, cybersecurity technologies and enterprise solutions to enable safer cities, with a vision to create a brighter future.



OnRobot delivers a full line of plug-and-produce end-of-arm tooling (EoAT) for collaborative applications. Our innovative grippers, sensors, and tool changers help manufacturers gain the full advantages of collaborative and lightweight industrial robots, including ease of use, cost-effectiveness, and safety alongside human workers.

Our advanced EoAT products help small and mid-sized manufacturers optimize their processes and grow their businesses with greater flexibility, higher output, and improved quality. Get everything you need from one innovative company.



ROS-Industrial Consortium Asia Pacific (ROS-I) is based in Singapore, and managed and represented by the Advanced Remanufacturing and Technology Centre, A*STAR Research Entities (ARTC).

ROS-I works with its Consortium Members on next generation robotics products and solutions, and helps support the robotics industry and community in Asia Pacific with workshops, events and training related to the Robot Operating System ("ROS").



Incorporated in 1996, TechSource Systems is the sole distributor in Southeast Asia for The MathWorks, Inc., developer of the MATLAB® and Simulink® family of products. We are committed to provide quality technology solutions that empower the engineering and R&D community, providing the ultimate computing environment for technical computation, design, simulation, visualization and implementation.

م و

1, 1