



News Release No. 10/22

Honouring ITE Students for All-Round Achievements

Awardees are recognised for excellence in character, skills, and innovation

ITE honoured **408** outstanding students at its annual **ITE Student Achievers' Awards Presentation Ceremony** held at ITE Headquarters this morning. These students were recognised for their holistic achievements and excellence in the arts, sports, co-curricular activities, and technological innovations.

Of these 408 students, **49** received the prestigious **Lee Kuan Yew (LKY) Award** – namely, the **LKY Model Student/Trainee Award**, the **LKY Co-Curricular (CCA) Award**, and the **LKY Technology Award**.

The other **359** students received the ITE Arts Excellence Award, the ITE Sports Excellence Award, the ITE CCA Medal and the ITE Student Commendation Award and Keppel Care Foundation Scholarship. Please refer to **Annex A** for a brief on the various Awards.

Not All Heroes Wear Capes

Muhammad Ezekeyle Ezra Olbrich Bin Wilfred John Olbrich is one of 10 students who won the **LKY Model Student/Trainee Award** this year.

Even though Ezekeyle is only 19 years old, he has been lauded as a hero. In 2019, he saved a family from fire in their home and received the SCDF's Community First Responder Award for his heroic act. His quick thinking, tenacity and desire to help others set him apart from his peers. This is despite his challenging beginnings.

Ezekeyle and his older brother grew up with their grandparents. Since he was in secondary school, he started taking on various part-time jobs to help the family financially. His grandfather was the sole breadwinner until two years ago, when he had to stop work due to health problems.

Ezekeyle puts in five to six hours every weekday evening as a food delivery rider. Yet he still maintained top scores in his course and graduated with a perfect Grade Point Average of 4.0! During Ezekeyle's six-month internship, his employer was so impressed with his performance during internship that it commended Ezekeyle in a letter to ITE.

On top of heavy work and family responsibilities, he was actively involved in Co-Curricular Activities (CCAs) and community service activities. He was a member of the ACE Achiever Club, the Class Vice-Chairman and a student mentor under the School of Engineering's Mentorship Scheme.

He believes that the hands-on learning style in ITE will help him build a strong engineering foundation and has since progressed to the *Higher Nitec* in Mechatronics Engineering course, despite qualifying for diploma courses.

Leading with Positivity and Creativity

Hannah Wang is a true-blue fighter. Despite going through multiple surgeries due to Meier-Gorlin syndrome, a medical condition that affects her growth, Hannah maintains a positive outlook in life. In her own quiet way, she uses her strengths in baking, cooking and art & craft, to give back to society.

Hannah displayed her creative side by designing tote bags and greeting cards that were presented to ART:DIS students and their caregivers/parents. In community service projects such as 300K Mask for Migrants and Project Warmth, she sewed reusable face masks for migrant workers and upcycled household waste into zipper pouches as Christmas gifts to the elderly.

Her penchant for craftwork reflects a meticulous side, which served her well as a librarian. As the Vice-President of Library Club, Hannah demonstrated maturity in executing induction and team bonding programmes. Hannah's heart for the community is evident as she aspires to serve others.

Hannah is one of three recipients of the **LKY CCA Award** this year.

Plants Monitoring at Your Fingertips

The presence of lush green leaves is a surefire way of predicting a bountiful harvest for common edible plants. Conversely, limp and lacklustre foliage is often a sign of nutrient deficiency. Regular visual inspection of crops is thus essential in ensuring that plant deficiencies are promptly spotted and treated at the earliest instance.

A team of four ITE College East students found this out the hard way, when the racks of hydroponics plants in their College's indoor farm yielded a poorer harvest due to lack of monitoring during the students' Home-based Learning weeks.

To tackle this problem, **Eldon Tay Li, Praveen S/O Nagatheran, Cheng Fan Qi, Yannis and Faith Yeo** came up with a **Plant Deficiency Detection Device**, which allowed them to monitor the crops remotely.

Equipped with a camera module and an Internet connection, the device is mounted on a slider guide rail and feeds real-time images of the plants to an online dashboard.

Using Machine Learning, a type of Artificial Intelligence technology, the device is able to 'learn' what diseased plants look like and automatically identify them. By accessing the dashboard from their smart phones or tablets, the students are able to effectively monitor the status of the farm anytime, anywhere.

"In the course of doing this project, we learnt how to work around challenges, like having to source for certain materials from overseas as they were not available locally. And although we had programming lessons in school, we appreciated the opportunity to pick up additional coding skills along the way," Eldon said.

For their innovation, the group is one of ten winners of the **LKY Technology Award** this year.

Profiles and Winning Projects

Profiles of the LKY Model Student/Trainee Award and CCA Award winners can be found in **Annexes B and C** respectively. Details of the LKY Technology Award winning projects are in **Annex D**.

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About Institute of Technical Education

The Institute of Technical Education (ITE) was established as a post-secondary institution in 1992, under the Ministry of Education. ITE is a principal provider of career and technical education and a key developer of national skills certification and standards skilling Singapore for the future economy. It offers three key programmes - (1) Pre-Employment Training for youths after secondary education (2) Continuing Education and Training for adult learners and (3) Workplace Learning and Work-Study Programmes with employers. Under its 'One ITE System, Three Colleges' Governance Model, ITE has three Colleges - ITE College Central, ITE College East and ITE College West. For more information, please visit our website at <https://www.ite.edu.sg>

BRIEF ON AWARDS

Lee Kuan Yew Model Student/Trainee Award

The Lee Kuan Yew Model Student/Trainee Award is presented to students and trainees who have performed consistently well in their courses and have displayed outstanding conduct and attitude worthy of emulation by their peers. The Award serves to inspire students and trainees to display exemplary behaviour in training, develop high moral values and show care and concern for others.

Lee Kuan Yew CCA Award

The Lee Kuan Yew CCA Award is presented to students who have demonstrated outstanding leadership and organisational skills, and have contributed significantly to the improvement and enhancement of campus life. The Award also serves to give recognition to students who have contributed and achieved excellence in sports, games and the arts.

Lee Kuan Yew Technology Award

The Lee Kuan Yew Technology Award is presented to students who have developed excellent projects that embody quality, technical innovation and creativity. The projects are also expected to have industry applications. The Award serves to inspire students to develop a zeal for challenges, creativity and competition.

LEE KUAN YEW MODEL STUDENT AWARD 2022 RECIPIENT PROFILE
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Name: Damien Loo Yi Heng
Course: *Nitec* in Electronics, Computer Networking and Communications
College: ITE College Central

Eyes on the Goal

Damien has a dream of setting up his own aquaponics farm. Aquaponics is a system which combines two areas of interest for him – aquaculture (fish farming) and hydroponics (growing plants without soil). He chose to enrol in ITE’s *Nitec* in Electronics, Computer Networking and Communications course, as he believes it would equip him with relevant skills to implement useful technologies in a farming business.

Determined to realise his goal and motivated by a desire to constantly improve himself, Damien excelled in his studies at ITE. He also actively seized opportunities to better himself, by taking part in numerous competitions and leadership programmes. His strong leadership skills shone through, and he was elected Vice President of ITE College Central’s Greenery Club.

From the Heart

“I aim to be the best that I can be. I may not be the brightest person, but I strive to put in more effort than others to excel. During my first year at ITE, I struggled with understanding basic concepts in my course of study. To overcome this, I would self-study at home every day. I also bought my own soldering kit to practise soldering at home every weekend. My lecturers guided me further, and gave me many opportunities to participate in different competitions. I really enjoyed these competition experiences. They helped to expand my knowledge, hone my presentation skills, and boost my confidence.”

Life after ITE

- Damien is pursuing a Diploma in Landscape Design & Horticulture at Ngee Ann Polytechnic.
- He aspires to set up his own aquaponics farm, where fish and plants are grown together.

Top Achievements

- Damien led a team to clinch the Diamond Award in the 2021 Community in Bloom Awards, a competition by the National Parks Board which recognises excellence in gardening efforts by community groups.
- He achieved a Grade Point Average score of 4.0, and was on the Director’s List for all terms from 2020 to 2021.
- By conceiving innovative solutions to sustainability issues, Damien and his team received the Judge’s Favourite Award in the Shell X ITE competition.
- For his dedicated service contributions, he received the ITE Service Star Gold Award in 2020.

LEE KUAN YEW MODEL STUDENT AWARD 2022 RECIPIENT PROFILE
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Name: Fatin Mayasari Bte Amran
Course: Nitec in Video Production
College: ITE College Central

Picture of Positivity

Telling stories, whether through music or moving pictures, is what Fatin Mayasari Bte Amran, sees herself doing for a long time. Though video production was something she stumbled upon after taking an interest in photography in secondary school, Fatin has grown to enjoy the process. Her excellent work attitude shone through in both her Co-curricular Activities and projects – a trait which earned her praises at the company she interned at.

Well-liked by her peers, Fatin does not hesitate to guide or push her classmates to do better. When a classmate displayed signs of depression, Fatin was there to support her mentally and academically. Today, Fatin continues to check in on her and celebrate each little step towards her recovery. For her diligence, spirit of excellence and positivity, Fatin is indeed a role model for peers.

From the Heart

“My best memory of ITE would be my Final Year Project. I learnt a lot about myself and my way of thinking during that period. The project basically summed up my past two years. If things don’t turn out well, or it is something that I had not envisioned, being able to change my perception can help turn things around for the better!”

Life after ITE

- Currently pursuing the Diploma in Media Post-Production at Ngee Ann Polytechnic
- Would like to explore a career in the media industry

Top Achievements

- Despite studying at ITE College Central, Fatin rose to become Section Leader and Vice President of the ITE West Concert Band – a band she has been a part of since secondary school as a guest member. She used her video production skills to put together a series of band recordings.
- She was the main editor and worked closely with the Class Advisor on the School of Design & Media’s Graduation Video.
- Fatin was also part of the ACE programme and was involved in a number of community events where she imparted the skills she learnt to secondary school students and Institute of Mental Health patients.
- Her outstanding work attitude meant that Fatin gives her all in whatever she does, and this was reflected in her excellent academic performance. She graduated with a perfect Grade Point Average of 4.0 and was on the Director’s List every semester.
- The multi-talented Fatin is also a songwriter (since she was 12!) but was too shy to showcase her work. One of her originals was featured in her Final Year Project.

LEE KUAN YEW MODEL STUDENT AWARD 2022 RECIPIENT PROFILE
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Name: Javen Francis Koh Wei Yang
Course: Nitec in Business Administration
College: ITE College Central

Making a Difference

Growing up in a family that is active in philanthropic activities, Javen developed a keen interest in serving the community. This led him to volunteer at Lions Befrienders, a charity that provides care for seniors. He also joined ITE College Central's Rotaract Club, where he spearheaded and participated in various community service projects.

In recognition of his leadership qualities, Javen was elected President of the Rotaract Club. He encouraged members of the Club to participate in community service projects which included food distribution to needy families. Beyond helping the less fortunate, Javen also sought to help his peers in their studies. He started an after-school revision programme with some classmates, where they would mentor those who need help in their schoolwork.

From the Heart

“As you teach, you learn. This is the belief that has spurred me to reach out to my classmates and help them in their studies. For me, it is the journey of helping others and succeeding together which makes learning more meaningful and enjoyable. At ITE, I was also blessed with lecturers who helped me and gave me many opportunities to achieve my potential. I appreciated that they really made the effort to connect with students and care for our well-being.”

Life after ITE

- Javen is pursuing a Diploma in Maritime Business at Singapore Polytechnic. He plans to take a Maritime degree programme, after attaining his Diploma.
- He aspires to set up his own maritime business in the future.

Top Achievements

- Javen excelled academically, achieving a Grade Point Average score of 4.0.
- He was the champion of a speech competition organised by the Rotary Club of Singapore for ITE students, where he paid tribute to the hard work of frontline workers amid the COVID-19 pandemic.
- He set up a Youth Wing at Lions Befrienders, to bring together like-minded youths with a passion in volunteering.
- Javen led his schoolmates to raise almost \$1,000 for the Central Singapore Community Development Council's Children Day's celebration, by selling customised bracelets. The funds were used to purchase necessities, such as stationery, for underprivileged children.
- For his outstanding service contributions, he received the ITE Service Star Gold Award in 2021.

LEE KUAN YEW MODEL STUDENT AWARD 2022 RECIPIENT PROFILE
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Name: Han Xin Ying, Constance
Course: *Higher Nitec* in Chemical Technology
College: ITE College East

More Than a Lab Rat

In Secondary Four, Constance was inspired to do well in Chemistry by a teacher who made the subject easy to comprehend. Since then, she endeavoured to further her studies in science and a natural choice after 'N' levels was *Higher Nitec* in Chemical Technology in ITE.

The course led her to an internship with Singapore Institute of Food and Biotechnology Innovation (SIFBI). Constance remembers the 20-week internship fondly as it opened her eyes to real work in the laboratory. Her job was to render operation support in areas concerning chemicals, safety, consumables and equipment. She picked up laboratory techniques and quality control skills, and even assisted researchers in operating a machine to test for pesticides on apples. Her stint in SIFBI fuelled her interest in investigative work.

Constance's inquisitive nature shines through beyond academics. She explored ways to overcome the challenges of organising an online camp on sustainability for youth in Sarawak and the first virtual Student Council Student Investiture. Constance's positive attitude towards studies and life sets her apart as an excellent role model for her peers.

From the Heart

"One must do well in other aspects besides studies. Step out of your comfort zone. Don't attend CCAs just for the sake of earning CCA points. You will learn something if you have a purpose. You will gain the most valuable thing – an experience. Nobody can ever take your experience away. Every experience builds character and you'll come out stronger and wiser."

Life after ITE

- Constance is studying a Diploma in Applied Chemistry in Singapore Polytechnic.
- Her career goal is to work in Central Narcotics Bureau's testing laboratory or join the Health Science Authority as a forensic specialist.

Top Achievements

- Constance was on her College Director's List in 2020 and 2021. She graduated with a perfect GPA of 4.0.
- She is a recipient of Edusave Award for Achievement, Good Leadership and Service (EAGLES) 2021 and Edusave Character Award 2021.
- In recognition of her active contributions to community, she received the ITE Community Scholarship (2020 & 2021) and ITE College East's Service Star Gold Award 2021.
- She is a responsible student deserving of leadership roles, such as Class Representative and the Chairman of CCA and Enrichment in Student Council.

LEE KUAN YEW MODEL STUDENT AWARD 2022 RECIPIENT PROFILE
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Name: Ong Cheng Boon Perren
Course: Nitec in Business Services
College: ITE College East

Find Extra in the Ordinary

Eighteen-year-old Ong Cheng Boon Perren is currently overseeing the R&D of his registered business, using the grant his team won in the ITE-NTU #Startable competition. Like his parents who are business owners, he has dreams of running a successful business in future.

Perren approaches things with curiosity yet he remains disciplined, humble and respectful of others. Juggling three demanding CCAs at ITE College East - Student Council, Bowling and Entrepreneurship Club - whilst maintaining an impressive academic record that earned him a place in the ACE Club for high student achievers, Perren is also an active member of the People's Association Youth Executive Committee at Serangoon Community Club. Even as he grapples with dyslexia, he demonstrates great resilience and determination in his studies and all tasks assigned to him.

A natural leader, he exerts positive influence on his peers, encouraging them to step out of their comfort zone, try new ways to overcome challenges and discover their strengths. Perren is truly a gem of a student.

From the Heart

"If you are unhappy with the path you're walking, chart your own! That's my philosophy in life. Life may throw different curve balls, but the one who endeavors and charges forward will emerge as the winner in the end. Despite my personal challenges, I am motivated to do my best, give my best and succeed on my own terms."

Life after ITE

- Perren is pursuing a Diploma in Business Studies at Ngee Ann Polytechnic.

Top Achievements

- Perren served as the Vice-President of ITE College East's Entrepreneurship Club, helming various initiatives.
- In the ITE-NTU #startable competition, as Project Lead, Perren was instrumental in devising an effective marketing plan and pitching of the invention (eco-friendly soap) to the judging panel which led to the team's emergence as one of the top three teams. The team was rewarded with \$1000 cash prize and a grant of \$5000 as start-up fund for their entrepreneurial venture.
- He is a recipient of the Rotary-ITE Student Excellent Award which recognises his academic achievement, commendable work attitude and leadership qualities.
- He also received the ITE College East's Innovation & Enterprise Award 2021.

LEE KUAN YEW MODEL STUDENT AWARD 2022 RECIPIENT PROFILE
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Name: Victoria Ann Gore Tay
Course: *Nitec* in Business Services
College: ITE College East

The Right Account

Initially, Victoria was torn between choosing Nursing or Business to study in ITE. Based on her gut feel, she chose Business Services. Her choice paid off handsomely as she aced her course. As an active member of Student Council, she participated in the Asia Virtual Exposure Series (AVES) Vietnam 2020 programme run by the National Youth Council. When her team was tasked to submit a proposal for a local accounting firm's expansion into the Vietnamese market, she realised the impact that accounting could have on business decisions and investor relations. Since then, she aspires to be an accountant.

With excellent *Nitec* results, Victoria articulated into the second year of a related *Higher Nitec* course. As she deepens her skills in ITE, her foundational knowledge in business will put her in good stead to specialise in accounting. In her free time, Victoria even reads up on accounting. She admits finding joy in inputting formulas in spreadsheets!

From the Heart

"The pace is faster in Higher Nitec and I'm enjoying it. There are new friends and it's a new learning environment. Since we are in Year 2, I appreciate that my lecturers try to push us out of our comfort zone - to be involved in more activities and to learn more - so that we can beef up our portfolio. I'm driven to do better."

Life after ITE

- Victoria is currently studying *Higher Nitec* in Human Resource & Administration at ITE College East.
- She intends to further her studies in accounting at the Diploma level.

Top Achievements

- A diligent student, Victoria attained a Certificate of Merit (2021) and EAGLES Award (2020).
- She was in the Director's List in 2020 & 2021 and graduated with a perfect GPA of 4.0.
- For her exemplary behaviour and active contributions to the community, she received the Edusave Character Award (2020) and ITE Community Scholarship (2020 & 2021)

LEE KUAN YEW MODEL STUDENT AWARD 2022 RECIPIENT PROFILE
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Name: Mohamad Hilman B Mohamad Hatta
Course: *Higher Nitec* in IT Systems & Networks
College: ITE College West

Detours Allowed!

A few years ago, Hilman was disinterested in studies and found himself demoralised, disrespected and without interest in life. Today, he is the pride of his family, school and community. His journey has not been easy. Pivotal to his success was a detour – one that saw him overcome his apprehension to resume studying in ITE at the age of 21.

With renewed focus, Hilman discovered a passion in IT. His outstanding academic performance landed him in the Director's List consistently and ACE Club for high achievers. Respected and well-liked by his peers, he was chosen to participate in the US Embassy Alumni Mentoring Programme 2021. Hilman also assumed various leadership roles in CCA groups – President of the Service Ambassador Club, Chairman of Student Volunteer Corp and Chairman of Class EXCO. He has won numerous awards in recognition of his contributions and achievements in and outside of school.

From the Heart

“Having suffered defeats and rejection at a young age, my priorities in life are very different now. I am very thankful for the awards and accolades. But these do not motivate me in life, these achievements do not define me. Your character should define you – your actions, your personal growth, what you stand for, these are more important. My journey is more important than my destiny. I will continue to grow into a better version of myself.”

Life after ITE

- Hilman is currently pursuing a Diploma in Information Technology at Singapore Polytechnic

Top Achievements

- Hilman was conferred the prestigious Persatuan Persuratan Pemuda Pemudi Melayu (4PM) Bestari Outstanding Student Award in 2021. This is, by far, the highest award accorded to Muslim ITE students by 4PM.
- He also received the 4PM Bestari Award 2021 and Lembaga Biasiswa Kenangan Maulud (PMBM Scholarship Fund Board) Academic Excellence Award 2021, both of which recognise ITE students for outstanding academic excellence.
- Hilma attained other accolades such as the Government Investment Corporation Study Grant 2021, Edusave Character Award 2021, Edusave Awards for Achievement, Good Leadership and Service 2021, Edusave Certificate of Academic Achievement 2021 and Edusave Merit Bursary 2021
- For his active CCA contributions, he was awarded the 21st Century Star Award – STAR category.

LEE KUAN YEW MODEL STUDENT AWARD 2022 RECIPIENT PROFILE
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Name: Muhammad Ezekeyle Ezra Olbrich Bin Wilfred John Olbrich
Course: *Nitec* in Mechatronics & Robotics
College: ITE College West

A Hero and an Inspiration

Muhammad Ezekeyle Ezra Olbrich Bin Wilfred John Olbrich is literally a hero. In 2019, he saved a family from a fire in their home and received the SCDF's Community First Responder Award. His quick thinking, tenacity and desire to help others set him apart from his peers. This is despite his immensely challenging beginnings. Ezekeyle's parents divorced when he was young so he and his older brother grew up with their grandparents. His grandfather was the sole breadwinner until two years ago, when he stopped work due to health problems. Since secondary school, Ezekeyle started taking on various part-time jobs to help his family out financially.

Even though he works as a food delivery rider for 5-6 hours every weekday night, he was on Directors' List Award for all semesters and graduated from his course with a perfect Grade Point Average of 4.0. Despite qualifying for polytechnic admission, he believes the hands-on learning style in ITE will help him build a strong engineering foundation and decided to progress to the *Higher Nitec* in Mechatronics Engineering course. During Ezekeyle's six-month internship, his employer was so impressed with his performance that it commended Ezekeyle in a letter to ITE.

From the Heart

"I want to do what I can to help people. I excel for the sake of others. My desire is to be a source of motivation for my family and friends, by living as a good role model. There is no room to give up. If I give up, who is going to care for my family?"

Life after ITE

- Ezekeyle is currently pursuing the *Higher Nitec* in Mechatronics Engineering course at ITE.
- His interest in engineering grew as he learned more about it in his *Nitec* course. He plans to be an engineer specialising in robotics, as he is intrigued by how man and machine can interact with each other.

Top Achievements

- He rescued his neighbour by using a fire extinguisher to put out part of the fire and break the gate's padlock so the family could escape, earning him SCDF's Community First Responder Award 2019.
- To Ezekeyle, the 4PM BESTARI Award 2021 (Top 5 Outstanding Awardees) is his most special and unexpected accolade. Other awards include Keppel Care Foundation Merit Award 2020 and 2021, National Youth Achievement Award in 2019 (Bronze), Edusave Character and Merit Awards 2020 and 2021 and Good Character Award 2020.
- On top of heavy work and family responsibilities, he was actively involved in CCAs and community service activities. He was a member of the ACE Achiever Club, the Class Vice-Chairman and a student mentor under the School of Engineering's Mentorship Scheme.

LEE KUAN YEW MODEL STUDENT AWARD 2022 RECIPIENT PROFILE
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Name: Ng Yeong Yee
Course: Nitec in Travel & Tourism Services
College: ITE College West

Set Up for Success

Since young, Ng Yeong Yee's ambition is to join the tourism industry. She is fascinated with the career prospects it offers, ranging from tour guide and attraction host to flight attendant. Her goal spurred her to be certified as an animal trainer under the Animal Presentation Development Programme during her internship with Jurong Bird Park. While it usually takes six months for a full-time staff to complete the certification programme, Yeong Yee took just three months!

As the President of Student Council, she led several activities that benefitted her College and the community. With her course mates, she hosted motivational talks for juniors on adjusting to the new norm of Home-based Learning. She also led a team to create a virtual tour of Fort Canning for Hong Kong students under the Virtual Exchange Programme. Despite being so busy, Yeong Yee gives back to the society by participating in events that promote public cleanliness.

Yeong Yee lives by this motto: Begin with the end in mind. She believes it is fundamental to set clear parameters to achieve a goal. Her determination, resilience and confidence won the praises of her lecturers and support from her peers.

From the Heart

"ITE has equipped me with the core knowledge of working life through internship, during which, I learnt how to communicate with people from all walks of life and different age groups. In ITE, I formed close ties with my peers and we share the same interest and passion in the tourism industry."

Life after ITE

- Yeong Yee is pursuing a Diploma in Tourism and Resort Management at Ngee Ann Polytechnic.
- She aspires to be a motivational speaker to encourage individuals to expand their learning opportunities.

Top Achievements

- For her excellent academic performance and conduct, Yeong Yee attained several awards including a Certificate of Merit (2021), 21st Century Star Award (2021), Edusave Character Award (2020) and EAGLES Award (2020 & 2021).
- Yeong Yee won the Gold Medal for the SBS SPEAK Cluster Competition and emerged as the Best Speaker in the SBS SPEAK Debating Challenge.
- Hardworking and motivated, Yeong Yee achieved a perfect GPA of 4.0. She was also on Director's List in 2020 and 2021.

LEE KUAN YEW MODEL TRAINEE AWARD 2022 RECIPIENT PROFILE
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Name: Lydia Tan
Course: *Nitec* in Business Services (Traineeship)
College: ITE College Central/Invade Industry Pte Ltd

Chiselled by Adversity

Twenty-year-old Lydia Tan does not let challenges keep her down for long. She grew up in a dysfunctional family and had to deal with financial issues. Her family did not have a fixed income, so she started working part-time during her secondary school days. Her salary, coupled with the money she won from awards in school, sustained her.

Lydia first took up the full-time *Nitec* in Finance Services course in 2017. She left the course after a year, as she felt unaccepted by her schoolmates. She decided to take up the traineeship course instead, so she could gain work experience and learn from working with adults. Through her traineeship programme, she has grown in confidence and in her ability to communicate with clients and colleagues who are older than her.

Lydia now manages a varied job scope that includes responsibilities such as overseeing the operations of a café, hiring staff and collaborating with consignment partners. Her challenging childhood has equipped her with the strength and resilience to flourish under pressure. With her determination and positivity, she has impressed her employer so much that the company has continued to support her as a trainee in the Work-Study Diploma in Event Management course.

From the Heart

“Challenges cannot keep me down for long. Even if I fall, I will just stand up and carry on.”

Life after ITE

- Currently pursuing the Work-Study Diploma in Event Management course with the same company – Invade Industry Pte Ltd - she had her *Nitec* traineeship stint with. Lydia is determined to keep growing in her skills and to build a stable life for herself.

Top Achievements

- After Lydia’s *Nitec* traineeship course, she was promoted from Assistant to Executive (Activation). Her good performance has given her employer the confidence to entrust her with greater responsibilities in the company.

**LEE KUAN YEW CCA AWARD 2022
RECIPIENT PROFILE**

Name: Esther Joice Tan Xuan Ting
Course: *Nitec* in Business Services
College: ITE College Central

Music, the Motivator

At a young age, Esther was enthralled by songs from cartoons and music played by her parents. Esther's journey into the realm of music began during her primary school days when she joined a brass band club. In secondary school, she became interested in different genres of music and joined a choir. Esther's potential in music blossomed when she joined That Acapella Group (TAG) as Music Director in ITE.

Apart from music, Esther shone as the President of Student Icons. She coordinated marketing efforts in producing promotional videos and oversaw content generation for social media posts on College events. She also embarked on several community projects. For a food donation drive, she initiated contact with Food from the Heart, a charity organisation, to support this activity. Esther's leadership qualities and dedication to community service gained the respect of her peers.

From the Heart

"In my journey at ITE, the lecturers really take care of our well-being. They are willing to hear my concerns and help me gain confidence when I am in doubt. Besides that, ITE has given me opportunities to learn new skills and participate in activities, such as ACE programme which equips me with leadership skills. I enjoyed learning at ITE as it provides a comfortable and lively learning environment."

Life after ITE

- Esther is pursuing *Higher Nitec* in Early Childhood Education at ITE College Central.
- She aspires to be an Early Childhood Educator to encourage learning in children while nurturing the children's sense of belonging.

Top Achievements

- Esther received several accolades such as Lee Kuan Yew Award for All-Round Excellence (2020), Rotary-ITE Student Excellence Award (2021), ITE CC Service Star Gold Award (2020) and Edusave Character Award (2019).
- She was on Director's List in 2020 and 2021 and attained a Grade Point Average of 3.946.
- Esther's contribution to TAG is instrumental in the team's winning of the Gold Award at the Acapella Championship 2021. Esther was in-charge of arranging music pieces, recordings and practice sessions.

**LEE KUAN YEW CCA AWARD 2022
RECIPIENT PROFILE**

Name: Nurqistina Atiqah Binte Abu Bakar
Course: *Higher Nitec* in Human Resource & Administration
College: ITE College East

Court Dreams

Fighting for justice in the courts is Nurqistina Atiqah Binte Abu Bakar's dream but a poor 'O' level Math grade meant that she could not get into the course of her choice at a polytechnic. Though she was offered a science-related course, Atiqah chose to further her studies at ITE instead. On top of earning a certificate along the way, Atiqah chose ITE for its internship opportunities as she felt it would help her get a better sense of working life.

To build up her portfolio and make the best of her two years at ITE, Atiqah seized every opportunity offered to her. Her commitment saw her participating in close to 50 college, community and national-level events – all while maintaining an almost perfect Grade Point Average of 3.935! Though a longer route, the ITE education journey was a most enriching one for Atiqah. More importantly, it gave her a second shot at attaining her legal dreams – in which she was successful!

From the Heart

"The best thing about ITE, apart from all the opportunities given to me, would be the amazing people I've met – my classmates, the caring lecturers, my Student Council mates... They were always there to cheer me on and support me. I really appreciate and treasure it."

Life after ITE

- Currently pursuing the Diploma in Law & Management at Temasek Polytechnic
- Inspired by the late criminal lawyer, Subhas Anandan, and his pro-bono cases, Atiqah hopes to work in the legal industry and make an impact in the community.

Top Achievements

- As President of the Student Council, Atiqah was involved/organised almost 50 events, including the Credit Suisse Mentoring Programme, ACE Programme, Singapore's Perspectives Conference and National Day Rally Dialogues.
- Despite her demanding portfolio in the Student Council, Atiqah remained diligent in her studies. She performed consistently well and earned herself an outstanding Grade Point Average of 3.935.
- Atiqah was also a keen volunteer, having participated in several national-level community projects, such as Coding Games for Kids, Digital Learning Circles and Walk for Rice.
- During her internship, Atiqah impressed her employer with responsibility and willingness to work hard. She emerged as the top-performing intern in her batch for that employer.

**LEE KUAN YEW CCA AWARD 2022
RECIPIENT PROFILE**

Name: Hannah Wang Shan Yi
Course: *Nitec* in Pastry and Baking
College: ITE College West

Bring It On

Hannah Wang is a true blue fighter. Despite going through multiple surgeries due to Meier-Gorlin syndrome, a medical condition that affects her growth, Hannah maintains a positive outlook in life. In her own quiet way, she uses her strengths in baking, cooking and art & craft, to give back to society.

Hannah displayed her creative side by designing tote bags and greeting cards that were presented to ART:DIS students and their caregivers/parents. In community service projects such as 300K Mask for Migrants and Project Warmth, she sewed reusable face masks for migrant workers and upcycled household waste into zipper pouches as Christmas gifts to the elderly.

Her penchant for craft work reflects a meticulous side which served her well as a librarian. As the Vice-President of Library Club, Hannah demonstrated maturity in executing induction and team bonding programmes. Hannah's heart for the community is evident as she aspires to serve others. Born to a family of teachers, her goal is to be an educator or be involved in psychological work in the social service.

From the Heart

"Be strong, be brave and be kind. Believe that you will go a long way when you have the right people there to support you."

Life after ITE

- Hannah decided to enter the workforce to gain work experience. She is currently working as a Craft & Design Associate in Green Sproutz Singapore, a social enterprise. Her duties include preparing craft materials for upcycling workshops and trainings.
- After this work stint, she may pursue a *Higher Nitec* in ITE or a diploma in a polytechnic.

Top Achievements

- Hannah was among the 20 students from each ITE College who received the Government Investment Corporation (GIC) Spark & Smiles Grant Award 2021. This award recognises students who are passionate about community work.
- She was awarded the ITE CCA Medal for Outstanding Achievement in Library Club in 2021.
- For active contributions to the community, she was given the ITE CW Service Star Gold Award (2020), ITE Community Scholarship (2020 & 2021) and Edusave Award for Achievement, Good Leadership and Service (*EAGLES*) in 2020 & 2021.
- In recognition of her stellar academic performance, she was in the Director's List in 2020 and attained a Certificate of Merit 2021, Edusave Skills Award 2022, Outstanding Graduate Award 2022 from her College and Top Graduate Award 2022 for the School of Hospitality.

**LEE KUAN YEW TECHNOLOGY AWARD 2022
WINNING PROJECTS**

Project Title: Fitsee – Kinematic Technology for On-the-go Exercise Posture Correction

Members: Esha Ellaki Kanagasabai (Group Leader)
Dylan Khoo Jing Zhi
Chia Xuan Zeng
Arnesh Ryan

Courses: *Higher Nitec* in Interaction Design
Higher Nitec in Mechatronics Engineering
Nitec in Fitness Training

College: ITE College Central

Moving Right, Keeping Fit

With the pandemic, more people have turned to indoor exercises to stay active and healthy. However, many do not adopt the proper form while exercising and risk injuring themselves. Fitsee guides users on maintaining the form to fully reap the benefits of the exercises.

Through footage captured by a camera, the application can track the users' form during exercise and provide real-time audio feedback. It also displays a score meter, which indicates the degree to which a particular movement or posture is accurately performed. The sensitivity of the score meter can be adjusted to suit the physical abilities of individuals across different age groups or fitness levels.

Innovators' Inspiration

"Many of us follow workout videos online, without knowing if we are doing the exercises correctly. For me, I discovered that I did some exercises such as planks, lunges and sit-ups wrongly. After improving on my form, I could feel the benefits of the exercises on my body. Such experiences inspired our team to create something that could help more people benefit from their exercises. Our team's name, 'Fitsee', represents our goal to help people 'see' the proper way to keep fit.

As we are from different courses, we combined our respective domain knowledge to make this project a success. Xuan Zheng taught us Python programming, while Arnesh showed us the correct exercise forms. In the process, we all learned something from one another."

- Esha Ellaki Kanagasabai

What's So Special

- The application can be run on any computing or mobile device with a camera, making it easy and convenient to use anywhere.
- A split-screen display enables users to see their form in real-time on one side of their device's screen, while viewing a demonstration video for the selected exercise on the other side of the screen.
- The application can track and provide feedback on the users' form for both static exercises and those involving large movements.
- The application uses computer vision, a field of artificial intelligence, for its visual processing and analysis functions.

**LEE KUAN YEW TECHNOLOGY AWARD 2022
WINNING PROJECTS**

Project Title: Home-based Vertical Farming

Members: Mohammad Rizq B Mohammad Rizam (Group Leader)
Lock Kai Jie
Davin Lim Yong Qi
Nurulain Binte Abdul Rashid

Courses: Nitec in Mechanical Technology
Nitec in Mechatronics & Robotics

College: ITE College Central

More Veggies, Peas!

Interested in growing vegetables at home but ‘corn’-cerned about the work involved? Just ‘leaf’ it to the Home-based Vertical Farming (HBVF) system – it will have you harvesting fresh vegetables in no time, and with little effort! The team developed a self-watering and monitoring system that takes up minimal space and runs on rechargeable batteries charged with solar power, making it an environmentally-friendly and sustainable way of farming. With Internet of Things (IoT), urban famers can reap the fruits of the system’s ‘labour’ and simply enjoy the calming effects of having plants at home!

Innovators’ Inspiration

“During the pandemic, we faced difficulties buying vegetables from the supermarket as many people were panic buying or hoarding vegetables. It was an eye-opener for us and we wanted to come up with a solution. So, we thought we could come up with a miniature farm that anyone can set up at home, with minimal hands-on work, and zero carbon footprints. And HBVF was it!”

- Mohammad Rizq B Mohammad Rizam

What’s So Special

- The vertical structure of the system can accommodate up to 24 plots of plants, each measuring 30cm by 30cm, enabling the user to grow different types of plants with just one system.
- The system runs on solar power. Since it does not need to be plugged into a power source, there is flexibility in placing the system at different locations.
- Compared to traditional farming, there is less water consumption as the Water Level Monitoring System will ensure that water is topped up only when required.
- Smart technology is used to make the HBVF system as self-sustainable as possible, even for those new to IoT and smart technologies.

**LEE KUAN YEW TECHNOLOGY AWARD 2022
WINNING PROJECTS**

Project Title: Re:Fresh! Freshmen Orientation Bot

Members: Scott Sofian (Group Leader)
Afiq Bin Ahmad Jamil
Marcus Lee Cher See

Course: *Higher Nitec* in Financial Services

College: ITE College Central

ChatBot, Roll Out!

New school, no friends, uncertainty over school rules and administrative procedures – it can be overwhelming for a freshman on his/her first few days at school! And even more so, if you are shy and afraid to ask questions. This was something that Afiq Bin Ahmad Jamil and his team noticed when they joined ITE. To help such students obtain the information they need in the most convenient and least intrusive manner, they came up with the RE:FRESH! Freshmen Orientation Bot.

The chatbot not only helps students but also benefits the school. It frees up time for Class Advisors and other staff as students need not search for them as often to search for information. The digitalisation of the orientation administrative process helps the school improve sustainability by saving on printing and paper.

Innovators' Inspiration

"We have a module that taught us how to set up chatbots for businesses, and we used that knowledge to create RE:FRESH! It was challenging for us because our tech knowledge is limited, so we relied on a variety of software to get the chatbot to work the way we wanted. It was a great accomplishment for us when we completed it. And to see it being used during orientation for the January and April 2022 intake – that was awesome!"

- Afiq Bin Ahmad Jamil

What's So Special

- The chatbot is targeted at freshmen so the information consolidated is tailored to address queries asked by new students.
- New students have relevant information on their school at their fingertips, at any time of the day.
- RE:FRESH! works on the Microsoft Teams (MST) platform that the school is already using so the system is both easily accessible and scalable.
- Zero start-up cost as RE:FRESH! was set up using open source software and existing software compatible with the MST platform.

LEE KUAN YEW TECHNOLOGY AWARD 2022 WINNING PROJECTS
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Project Title: Sit and Walk Walker

Members: Lim En En (Group Leader)
 Teo Guan Xien
 Ong Yong Heng Javier
 Camelia Leng Ying Xin

Course: Nitec in Mechanical Technology

College: ITE College Central

Mobility and Comfort

When choosing a walker, why should one be made to choose between mobility and comfort? The team came up with a unique design for a walker that provides stability and allows users to move around comfortably. 'Sit and Walk Walker' comprises a full-frame walker and seat with wheels. It seeks to enable the elderly and rehabilitative patients walk with support, sit down whenever they need a break, and most importantly, sit and use their legs to propel forward when they want to move albeit slowly. Ultimately, the walker will give its user the freedom to manage his/her movement and at their own comfort level.

Innovators' Inspiration

"Walking might be second nature to us but for the elderly and people who have injured their legs, it can be a challenging task. Watching my grandmother struggle to walk long distances and climb stairs is a stark reminder of that reality. These challenges can hinder their quality of life, and inevitably affect their mental well-being. We want to design a walker that will give them both mobility and comfort. With this objective in mind, we worked on improving our design and we are happy with the end product."

- Lim En En

What's So Special

- Most commercial walkers are not designed to support body weight for a prolonged period. The lack of structural support for the upper body increases the risk of falling. While some models do include a seat fixture, there is none that allows one to sit and move forward at the same time.
- Seated comfortably on a seat fitted with wheels, the user may place their hands on the walker and use both legs to propel himself/herself forward.
- The ergonomic design of Sit and Walk allows users to move even if they are in a resting position, i.e. sitting down. The team researched to ensure the design aids users in moving around while reducing the risk of falling or sustaining a back injury.
- The design also takes into account practical considerations, such as ensuring the width of the walker frame fits a standard-sized toilet bowl, in case the user needs to access the restroom.

**LEE KUAN YEW TECHNOLOGY AWARD 2022
WINNING PROJECTS**

Project Title: iStretch

Members: Lai Shihua (Group Leader)
Ang Guo Ting, Aston
Amal Zikri Bin Azman

Courses: Nitec in Mechanical Technology
Higher Nitec in Mechanical Engineering

College: ITE College East

Stretching the Limits

People with mobility difficulties, such as stroke patients or those with disabilities, are more susceptible to Deep Vein Thrombosis (DVT). The risk of DVT can be effectively minimised by doing simple exercises that promote blood circulation in the body, especially around the ankles. The team designed iStretch to allow its users to flex their ankles and stretch their leg muscles easily and effortlessly.

The device comprises a 3D-printed sole with acupressure points and a spring actuation mechanism, mounted on a laser-cut adjustable acrylic platform. Compact and portable, iStretch is designed for independent use in various settings, with minimal professional intervention. Since patients can operate the device on their own, it may reduce their dependency on a caregiver or nurse. The team was in talks with AWWA Rehabilitation Centre on the testing of iStretch as a possible assistive device that can provide ankle rehabilitation and physical therapy for people with mobility issues.

Innovators' Inspiration

"We encountered many challenges in the design process and went through many rounds of design iteration before arriving at a workable solution. This gave us the opportunity to be exposed to different technologies, such as 3D printing, simple programming, electrical wiring and laser cutting. We certainly learnt a lot from this project!"

- Lai Shihua

What's So Special

- There is currently no one-size-fits-all mobility assistive device in the market – existing solutions are made either for patients who are relatively mobile but benefit from such therapy or specifically for those who are bedridden, but not both. With iStretch, both groups of users are able to benefit from a single device.
- The device is nifty, portable and can be used in most settings with ease, unlike some machines in the market, which are bulky and can only be operated in a hospital or clinic.
- Data collected by sensors on the device allows for more effective monitoring of patients' rehabilitation progress. There is even a game-based element built in to motivate patients to achieve activity goals.
- The team prides itself on coming up with a low-cost solution, so that those who truly need the product would not be disadvantaged due to affordability issues.

LEE KUAN YEW TECHNOLOGY AWARD 2022 WINNING PROJECTS
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Project Title: Plant Deficiency Detection Device

Members: Eldon Tay Li (Group Leader)
Praveen S/O Nagatheran
Cheng Fan Qi, Yannis
Faith Yeo

College: ITE College East

Courses: *Higher Nitec* in Electronics Engineering
Nitec in Electronics & IoT

Seeing Green

Regular visual inspection of crops is essential in ensuring that plant deficiencies are promptly spotted and nipped at the earliest instance. When hydroponics plants in the College's indoor farm yielded a poorer harvest due to lack of monitoring during the students' Home-based Learning weeks, the team came up with a Plant Deficiency Detection Device, which allowed them to monitor the crops remotely.

Equipped with a camera module and internet connection, the device is mounted on a slider guide rail and feeds real-time images of the plants to an online dashboard. Using Machine Learning, a type of Artificial Intelligence technology, the device is able to 'learn' how diseased plants look like and automatically identify them. By accessing the dashboard from their smart phones or tablets, the students are able to effectively monitor the status of the farm anytime, anywhere.

Innovators' Inspiration

"In the course of doing this project, we learnt how to work around challenges, like having to source for certain materials from overseas as they were not available locally. Although we had programming lessons in school, we appreciate the opportunity to pick up additional coding skills along the way."

- Eldon Tay Li

What's So Special

- Smart farming solutions like this are in line with Singapore's '30 by 30' goal to build up the agri-food industry's capability and capacity to produce 30% of Singapore's nutritional needs locally and sustainably by 2030.
- Using technology to monitor the status of the farm greatly reduces labour-intensive manual checks. It also allows for faster detection of plant diseases, thereby allowing quicker intervention, leading to improved harvest quality.
- With the Plant Deficiency Detection Device, round-the-clock monitoring of plant health can be done remotely anytime on personal computers, tablets and smart phones.
- The device can be upgraded to integrate more functions, such as being linked to sensors for monitoring humidity, temperature and pH value.

**LEE KUAN YEW TECHNOLOGY AWARD 2022
WINNING PROJECTS**

Project Title: Buzzermatic

Members: Muthuramalingam Kathir (Group Leader)
Issac Lee Hong Zhe
Lim Yuan Jie

Course: *Higher Nitec* in Mechanical Engineering

College: ITE College West

Buzz Alert!

When a hearing aid runs low on battery or does not work due to a faulty earpiece, it may cause inconvenience to a hearing-impaired person, as he/she would not be able to hear. The team's solution is Buzzermatic – a wearable device that vibrates to alert users when they are being called by another person.

A minimum of 50 audio clips per wake word were recorded from people with whom the user frequently interacted. Wake words would activate a device when spoken. The microcontroller board detects these customised wake words through speech recognition and sends a signal to the sensors. Even though the user cannot hear, he can feel the vibration from the wearable device and realise someone is calling out to him/her.

Innovators' Inspiration

“One of our classmates is partially hearing-impaired. We noticed sometimes he is without the hearing aid, as it has to be sent for repair or ran out of battery. This has caused him to be without the hearing aid for the whole day and it takes us several attempts to get his attention. Hence, we came up with this project as we wanted to do something to help people with hearing difficulties.”

- Muthuramalingam Kathir

What's So Special?

- Buzzermatic can operate with any portable charger.
- The device has high speech recognition accuracy due to the audio recordings of people whom the users frequently communicate with.
- Hearing aids may be uncomfortable to wear. This device offers an alternative alert using vibration, which may be less intrusive.
- There is potential in enhancing Buzzermatic in future such as creating an app for users to operate using their mobile phones.

LEE KUAN YEW TECHNOLOGY AWARD 2022 WINNING PROJECTS
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Project Title: Intuition with Rosbot

Members: Tileron Levi Jan Lacang (Group Leader)
Go Si Wei
Kenneth Foo Zi Yang
Choo Zhi Hao Chris

Courses: *Higher Nitec* in Electronics Engineering
Nitec in Security Technology

College: ITE College West

Robotic Fusion

In today's learning landscape, it is a challenge for educators to keep students engaged and excited over e-learning. The trick may be to infuse interactive elements into the pedagogy by enlisting the help of robots. The team developed an autonomous user-friendly robot that can assist and teach students about artificial intelligence (AI) and Robotics.

Powered by AI technology and a Robotic Operating System (ROS), the autonomous robot can interact with students as they learn coding and Python programming language on a website. The navigation system is modular to effectively coach students in the foundation of robotics. There is an easy-to-follow guide for students to design their own robot so that they can enjoy some hands-on experience in building robots.

Innovators' Inspiration

"Learning about robotics is one of the challenges we faced because it is not included in the course module. With this project, it allow us to better understand AI and robotics, and share our experiences with those who are keen to know more about it."

- Tileron Levi Jan Lacang

What's So Special?

- The e-learning website provide tools, such as Python Bug Fixer and code explanation to assist students in solving programming issues.
- The robot will be able to provide friendly and intuitive interaction with its user through a platform that can either be a standalone or implemented with the robot.
- The system is fully modifiable as the robot's tasks and functions are limitless. Students can have more hands-on work while learning about robotics.
- The team used open source software to reduce the system's complexity and keep costs low.

**LEE KUAN YEW TECHNOLOGY AWARD 2022
WINNING PROJECTS**

Project Title: License to Save

Members: Caleb Peh Qixuan (Group Leader)
Bryan Asael
Chew Guo You
Ong Jun Xiang

Course: *Higher Nitec* in Mechatronics Engineering

College: ITE College West

License to Save

During the COVID-19 pandemic, there was a shortage of ventilators around the world. The team was disturbed by distressing news reports that showed how a ventilator could decide whether a patient lived or died, and how people desperately tried to obtain it during emergencies. They decided to use their skills to come up with a possible solution.

A pumping mechanism formed the basis of their innovation, as they successfully created a prototype that could deliver a mix of air with oxygen to respiratory patients and generate an ideal pressure and airflow in the lungs. This alternative to the traditional ventilator incorporates other useful tools that may be able to support healthcare professionals, who are under immense pressure during a pandemic. The team decided to pack all tools into a case that resembles a briefcase, so that it is portable and cost-effective.

Innovators' Inspiration

“To crowdsource ideas to incorporate different features in our device, we spent time talking to friends, family members and teachers. Our module lessons taught us essential skills that we needed to produce our prototype, but we also did additional research to learn beyond the classroom. We intentionally avoided using ‘high-technology’ parts, but focused on using fewer parts, each of which can be easily designed and rapidly fabricated at low cost.”

- Caleb Peh

What's So Special

- ‘License to Save’ includes additional functions that can measure heart rate and oxygen level to control the ventilation flow, measure body temperature, sense and monitor patients’ motion over time as a sign of activeness.
- It includes a 3-in-One UV sanitiser that can sanitise tools and materials like face mask, glove, tools or equipment.
- It can monitor and send data over the internet to medical personnel for remote monitoring. There is even an emergency button to alert medical personnel remotely and on-site, when the patient needs help.
- Tele-operation is possible – one can do remote monitoring over the internet and control or adjust the ventilator.

LEE KUAN YEW TECHNOLOGY AWARD 2022 WINNING PROJECTS
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Project Title: Virtual Physio

Members: Lim Joon Wei (Group Leader)
Raeann Tai Yu Xuan
Gui Wang Ying Joreen

Course: *Higher Nitec* in IT Applications Development

College: ITE College West

Making Exercising Easier for Seniors

Physiotherapy exercises are important for seniors to maintain their muscle strength and stay active. However, most seniors will only go to a physiotherapist when they are injured. With Singapore's ageing population and the COVID-19 pandemic pushing more people to stay home, the team designed the Virtual Physio software that aims to help seniors do physiotherapy exercises independently in their homes. The software is a low-cost solution that uses Artificial Intelligence (AI) Technology to guide the user in exercises that increases in difficulty, while the AI algorithm tracks their movements and progress.

Innovators' Inspiration

"With 'Virtual Physio', we hope to help the elderly do their exercises in an easy and low-cost way. We also hope to expand the usage to the elder care industry, by providing a template for them to add on other exercises."

- Lim Joon Wei

What's So Special

- The software incorporates Python, Open CV, AI framework technology.
- The team hopes to develop the cost-effective software into a mobile app. Currently, it is made for use on desktop computers and laptops.
- The software uses AI to capture users' movements via a camera.
- With an open source software, the team has made it easier for others to make enhancements in future.