

### MESSAGE FROM HoP, Prof Ricky Ang

Dear EPD family,  
It has been a very eventful 2017. Our Programme was officially awarded full accreditation by the EAB, our social media channels were launched, we had a smooth change of leadership in the Pillar and we continued seeing growth in our student intake and awards won by students and faculty. Our graduates received good jobs and EPD was even voted to have the best design workshop during our Open House! In the coming year, I hope that that we will continue to receive support from all members of EPD to ensure this sustained growth. Have a very Merry Christmas and Happy New Year!



### ACHIEVEMENTS & ANNOUNCEMENTS

The SUTD Organization of Autonomous Robotics (SOAR), comprising EPD students Chen Bainian, Jason Swee Shao Wen and Lee Jun Yu amongst others, exhibited Waiterbot, an autonomous waiter robot, during the Intel Young Maker Summit and Maker Faire Singapore.



A team of SUTD students comprising EPD Juniors **Emmanuel Tang, Ashwin Venkatram, Adam Haziq** and 2 Freshmore students participated in the Autonomous Aerial Vehicle Challenge (AAVC), hosted by Suranaree University of Technology in Thailand. The team designed a heavy lift mothership to mechanize payloads, with the usage of advanced vision algorithms. They won "Best Design Award" for their proposal.



Assistant Professor Dawn Tan was awarded the prestigious L'Oreal Singapore for Women in Science National Fellowship 2017 for harnessing nonlinear photonics for a faster, cost-effective and power-efficient internet network.



### UPCOMING EVENTS

24 Jan

EPD Research Seminar Series

27 Jan

Poly Engagement Session (with Admissions)

31 Jan

EPD Research Seminar Series

Follow us at @epd.sutd!

If you are interested in writing a review for any of our EPD site visits, please contact the EPD UG Office.

### REVIEW: EPD SITE VISIT TO INFINEON (22 NOVEMBER 2017)

By Chua Shi Hui, EPD Sophomore, Electrical Engineering Track

When signing up for the Infineon site visit, I knew that Infineon was an electronics and semiconductor company, and was interested in finding out what they do and looking at some of their supply line operations. About 20 students went for the visit.

When I reached there, I saw many of their patents on display and realized that they actually do a lot of research and development work, on top of just production. Some of their products on display are the new technology in electronics which they have developed. Talks by their engineers gave me more insight into what they do and made me realize that they are the ones driving Moore's Law and bringing more conveniences into our everyday lives. They continually improve the function and efficiency of electronic components, improving our lives without us knowing. Infineon chips exist in refrigerators, phones, cars and even smart cards.

We also went on a virtual tour of their production and testing facility, watching the technicians work real time through powerful cameras which can zoom in to see the label on the box clearly. The facility operates 24/7 on 12h shifts, using Automated Guided Vehicles (AGVs) to transport boxes of their electronics and robotic arms to sort and arrange the boxes.

All these gave me a better understanding of how industrial tier manufacturing works, and how innovation in electronics can continue to drive the industry forward and improve the world. The site visit was a success and it made me interested in Infineon.



A screen showing views of different parts of the testing line. People pack and unpack boxes of equipment at the top left, and send the boxes down through the top middle picture. Top right shows where they store their boxes, retrievable by robotic arms. At the bottom are where their technicians test their products. Sometimes an AGV can be seen delivering the boxes to them.