

2017 Tech Trends Symposium – “The Next Big Thing in Wearables”

2017 科技前瞻研討會 - 「穿戴式裝置下一個飛躍」

Date 日期	: 13 / 4 / 2017 (Thursday 星期四)
Time 時間	: 2:30pm – 4:30pm
Venue 地點	: Seminar Room, Halls 5F-G, Level 5, HKCEC 香港會議展覽中心 5/F 展覽廳 5FG 研討室
Languages 語言	: English with Simultaneous Interpretation in Putonghua 英語 (附設普通話即時傳譯服務)
Organisers 主辦機構	: Hong Kong Trade Development Council 香港貿易發展局 Federation of Hong Kong Industries 香港工業總會 Hong Kong Electronics Industry Council 香港電子業總會
Co-organisers 協辦機構	: Hong Kong Electronic Industries Association 香港電子業商會 Hong Kong Electronics & Technologies Association 香港電子科技商會 Vocational Training Council 職業訓練局
Remarks 備註	: Free Admission 費用全免

TENTATIVE PROGRAMME 擬程表

Time 時間	Programme 程序
2:15pm-2:30pm	Registration 登記
2:30pm-2:35pm	Welcoming Remarks 致歡迎辭 by Mr Steve Chuang, Chairman of Hong Kong Electronics Industry Council
2:35pm-2:55pm	Topic: Improving Wearables, Improving Lives Transforming Lives with Digital Health Speaker: Ms Candy Gao, Regional Director, Fitbit
2:55pm-3:15pm	Topic: From Accurate Wearables / Hearables To Mobile Health Speaker: Mr Kow Ping, Director & Co-founder, Well Being Digital Limited
3:15pm-3:35pm	Topic: Textile-based Wearable Electronic Materials and Devices Speaker: Dr Zijian Zheng, Associate Professor, the Institute of Textiles and Clothing, The Hong Kong Polytechnic University
3:35pm-3:55pm	Topic: Wearable Electronics for Rehabilitating Stroke Survivors in an Ageing Population Speaker: Prof Vincent Cheung, Associate Professor, School of Biomedical Sciences, The Chinese University of Hong Kong
3:55pm-4:30pm	Panel Discussion and Q&A Session 討論及答問環節 Moderator: Mr Wayne Leung, Chief Executive Officer, Tappy Technologies Limited
4:30pm-5pm	Lucky Draw Session 抽獎環節 Prizes: Bluetooth speakers and wearable products 獎品: 藍芽揚聲器及穿戴式產品 Remarks: Participants of this seminar, by presenting valid visitor badges at the reception counter outside the seminar room, will receive a lucky draw ticket to join the lucky draw session at the end of the seminar. For terms and conditions, please refer to the back of the lucky draw ticket. 備注: 研討會參與者，可憑有效之訪客證件，於研討室門外之招待處獲得抽獎券乙張，參與此抽獎環節。詳情請參閱抽獎券背面之細則。

Remarks 備註:

Free admission. Seats are granted on a first-come-first-served basis. 免費入場。座位有限。先到先得。

Trade only and persons under 18 will not be admitted. 只接待 18 歲或以上業內人士進場。

The Organiser reserves the right to make any changes without prior notice. 主辦機構保留任何更改之權利而不作另行通告。

ABOUT THE SPEAKERS 講者簡介



Ms Candy Gao, Regional Director, Fitbit

Candy joined Fitbit as Regional Director for Hong Kong and Taiwan in November 2015. In this role, Candy's primary responsibility is to fulfill Fitbit's vision in Digital Healthcare and bring the company's latest device, software and service offerings to these markets.

Prior to Fitbit, Candy was with SanDisk Corporation since 2009 with her latest role as Country Manager for SanDisk Corporation Hong Kong and Philippines, for driving where the company's retail channel sales of flash memory products in the respective markets.

Before joining SanDisk, Candy worked at GN Netcom in San Diego, USA, later relocating to Hong Kong as Channel Marketing Manager, Asia Pacific, to set up the company's regional marketing department, and spearhead the branding and marketing campaigns for the Jabra brand throughout the region.

In her spare time, Candy is an avid photographer and loves to travel the world in her spare time.

Abstract of Presentation

Digital Health is the emergence of powerful technologies that connect people's health data through a digital health platform to the healthcare ecosystem so as to help everybody lead healthier lives, reduce healthcare costs and broaden the reach of our healthcare system.

Fitbit plays a pivotal role in this area with its pioneering technologies in tracking continuous user biometrics in the cloud, providing user health insights, guidance and coaching, thereby helping people to make important changes to their lifestyles and daily behaviors.

**Mr Kow Ping, Director, Well Being Digital Limited**

Kow co-founded Well Being Digital in 2013 to develop physiological sensing technology such as in measuring dynamic heart rate and motion activity sensing. It is a company that aspires to enable the world's largest suite of Preventive Healthcare Devices.

He received Bachelor's degree of Computer Engineering from Nanyang Technological University in 1993 and Master's degree of International Management from University of London International Programme in 2016.

ACHIEVEMENTS

2016: Mobile World Congress 2016 - Best Wearable Mobile Technology (against Guess, Epson, Motorola and Intel)

2016: WITSA Global ICT Excellence Award

2016: Hong Kong ICT award - Grand Prize of Best Smart Hong Kong

2015: 43rd Geneva Invention Convention - Gold Medal & Innovation Award

Abstract of Presentation

The application of Wearables / Hearables towards Preventive Healthcare requires much higher accuracy than what Wearables 1.0 have delivered and as these devices become part of the consumers' lifestyle, the demand for accuracy is sublimely demanded so that useful insights / advise can be dispensed to the consumers to help them lead a better life.



Dr Zijian Zheng, Associate Professor, the Institute of Textiles and Clothing, The Hong Kong Polytechnic University

Dr. Zheng is Associate Professor at the Institute of Textile and Clothing, The Hong Kong Polytechnic University. His research interest includes nanolithography, surface science, polymer science, flexible and wearable electronics. He received BEng from Tsinghua University in 2003 and PhD from University of Cambridge in 2007. After a short postdoc training at Northwestern University, he joined HK PolyU as Assistant Professor in 2009 and was promoted to Associate Professor in 2013. He has published ~70 papers in high-impact journals such as *Science* and *Nature Communications* and filed 15 patents. He is recipient of more than 10 academic awards.

Abstract of Presentation

Wearable electronics is foreseen to be the next major technology after smart phone in the near future. However, most conventional electronic devices are rigid, bulky, and heavy, making them difficult to wear. On the other hand, textiles are materials that have been worn by human beings for more than a thousand years. Textiles are comfort, lightweight, conformal, and highly manufacture-able. This talk will introduce how our research group makes use of textiles for wearable electronics. These textile-based electronic devices can function as high-performance electronics while maintaining the flexibility, lightweight, permeability, processibility, and even washing ability like textiles.



Prof Vincent Cheung, Associate Professor, School of Biomedical Sciences, The Chinese University of Hong Kong

Vincent C.K. Cheung is at present Assistant Professor at the School of Biomedical Sciences of The Chinese University of Hong Kong. Vincent's research has focused on understanding how the nervous system controls voluntary movement and enables learning of motor skills. For many years he has worked closely with MIT Institute Professor Emilio Bizzi on the idea that the CNS translates a motor intention into a suitable motor command by combining basic modules of movement. On the applied side, Vincent is interested in exploring how knowledge of movement modules may be translated into a new rehabilitation strategy for stroke survivors. He and his collaborators have recently proposed that distinctive muscle-synergy patterns may be used as markers of motor cortical damage in stroke patients. Vincent's papers have appeared in reputable journals such as *Journal of Neuroscience*, *PNAS*, and *Neural Computation*. He has been invited to speak at neuroscience and engineering conferences worldwide.

Abstract of Presentation

Neural injuries from stroke disrupt the patterns of muscle activation during movement. A major challenge for stroke rehabilitation is to re-establish the normal muscle patterns through a general restoration of motor control. In clinical post-stroke intervention, new technologies such as multi-channel neuromuscular electrical stimulation (NMES) offer a solution for non-invasively targeting specific groups of muscles. In principle, such muscle stimulations may be delivered through a wearable electronic device. In this talk, I will discuss how the concept of "muscle synergy" – hypothesized to be fundamental modules for motor control – may be leveraged as a guiding principle for designing personalizable post-stroke rehabilitation. I will argue that an NMES-based intervention that targets a set of muscles within a specific muscle synergy, delivered using a wearable device, may lead a much better clinical outcome than existing standard therapies.

**Moderator of Panel Discussion and Q&A Session****Mr Wayne Leung, Chief Executive Officer, Tappy Technologies Limited****Aim Firmly, Explore Persistently**

Mr. Leung believes in the rapid market expansion of wearable technology products. The macro trend will trigger off the huge market potentials of watches. 7 years ago, with his dedicated vision and mission, Mr. Leung set up Faze In Limited and built up his brand EZIO. As an industrialist of the second generation, Mr. Leung realized that success would be a result of great efforts and the contributions of the past generation attributed only partially to the future business goals defined by himself. Mr. Leung, a young industrialist, has equipped himself with a fighter's spirit in order to set sail from his existing business comfort zone. He won and lost, fought and thought. No frustration can deter Mr. Leung's determination to pursue his dreams and such a man should warrant support and respect.

Commercialization of Innovative Technology

By adopting innovative technology, Mr. Leung has endeavoured to make traditional watches to witnessing the incorporation of the functions of Contactless Payment, connecting and storing mobile data; and IoT devices into a new kind of wearable product. He managed to blend technology into the time-honoured old forms of watches and jewellery. Understanding that the lack of a constant supply of battery has been a common problem for the smartwatches in the market, Mr. Leung created the first blendable battery watchband in the world. His invention would be a great help to the long-term R&D of smartwatches. His 2 unique inventions were formally pending for patent registration. During Mr. Leung's R&D processes for these new inventions, he encountered many hardships and failures. He overcame the hard times bravely and resurrected his energy soon after the defeats. Mr. Leung's mindset and character could not be regarded as usual in the trade and his final accomplishments are solid proof of his track records in the industrial rejuvenation and breakthrough.

Elevating, Transforming & Co-Sharing

Enriched by the experience from his numerous roles in the past years, Mr. Leung has worked very hard to contribute to the traditional watch and jewellery business with his creative concepts and innovations. His development of a speedy and pioneering wearable payment solution has

excited the market with a promising business option. The technology has also elevated the reputation and recognition of his company. The invention will greatly benefit the public consumers. Since the payment solution can be made accessible and available to all the shops in the world with Contactless Payment POS terminals, its impacts and successes are to be profound.

Recognized for Promoting the Development of Watch Industry

In 2016, Faze In Limited, led by Mr. Leung, was awarded by The Hong Kong General Chamber of Small and Medium Business with honour of “The Best SME”. The brand of EZIO also won the acclaim of “2011 Hong Kong New Star Brand Award”. Such achievements and recognitions enabled Mr. Leung’s company to be given the honour of “Caring Company” Award for a long history of 6 years.

Apart from work, Mr. Leung took part in the community services. In 2009, Mr. Leung was elected as the Honorary Chairman of YIC Youth Chapter under Hong Kong Young Industrialists Council. During his term, Mr. Leung, among other jobs, organized lectures and seminars for the trade. His target was to help the young industrialists be informed about the funding assistance and support from the Government and how these schemes could assist the businesses in the trade in developing and improving their future. He also arranged for Hong Kong Science and Technology Parks Corporation and Hong Kong Productivity Council, VCs & startups to talk and share with the enterprises of different groups in the trade. Making the watch industry in Hong Kong appreciating the importance of innovation, technology and creative initiatives; and so positively enhancing the sustainable development of the industry is what Mr. Leung wanted to attain and in fact, is what Mr. Leung has tremendously achieved for Hong Kong.