2022 WITSA Global Innovation and Tech Excellence Awards
<u>Nomination Form</u>

The 2022 WITSA Global Innovation and Tech Excellence Awards *(*formerly known as *the Global ICT Excellence Awards*) will be presented to select individuals, academic institutions, corporations, NGOs or governments whose use and applications of digital technologies exhibit exceptional achievement within the following broad categories:

Private Sector/NGO	Public Sector
Digital Opportunity/Inclusion Award	Digital Opportunity/Inclusion Award
Smart Cities Award	Smart Cities Award
Sustainable Growth/Circular Economy Award	Sustainable Growth/Circular Economy Award
Innovative eHealth Solutions Award	Innovative eHealth Solutions Award
Public/Private Partnership Award	Public/Private Partnership Award
E-Education & Learning Award	E-Education & Learning Award
Emerging Digital Solutions Award	Startup Ecosystem Award

In addition, a *Chairman's Award* will be presented to a nominee selected from the entire pool of candidates from all award categories.

Candidates for these Awards are nominated by ICT experts from around the world who span over 80 countries/economies. The 2022 *WITSA Global ICT Excellence Awards* will take place in conjunction with the September 13-15, 2022 World Congress on IT in Penang, Malaysia (**https://wcit2022.com/https://wcit2021.org.bd/**).

Digital Opportunity/Inclusion Award
Award #1: Individuals, academic institutions, corporations, or NGOs
Award #2: Government authorities

<u>Award Criteria</u> - Individuals, corporations, academic institutions, corporations, NGOs or government authorities that have made a remarkable and successful effort at providing digital opportunities to those in need are eligible for this award. In order for the Digital Age to fulfill its promise, it must consider the unique challenges faced by diverse populations. Examples could include deployment of ICTs and Internet access among inner city populations, or in towns, rural areas or cities in developing and least-developed countries. This award also includes programs and initiatives that aid people with disabilities and others who face longstanding barriers to social inclusion. Digital Inclusion is defined as the "ability of individuals and groups to access and use information and communication technologies (ICTs). Digital inclusion encompasses not only access to the Internet but also the availability of hardware and software; relevant content and services; and training for the digital literacy skills required for effective use of ICTs."

This award recognizes solutions enabling accessibility for those individuals who have traditionally not benefited from ICT. This award also seeks innovative solutions that create meaningful employment through ICT for those who have traditionally been underrepresented in the labor force. Of particular interest to WITSA are applications that embed inclusion and accessibility in the original design as opposed to retrofitting existing applications.

YOUR NOMINEES (limit three nominations per award category). *Please specify whether the nominee(s) are for the private or public sector category*.

Private Sector -

Nominee: Descamps.Technology Limited

Entry Name:
> Ambient 16: AI and Data for Singleton Elderly Care in the Rural Areas of Hong Kong
> *"Reach the unreachable in Sai Kung"*

REASONS FOR NOMINATION (NOTE: It is important that you make a detailed description of the nominee and why you think the nomination is justified. The absence of a detailed summary of qualifications as they *relate* to the above-mentioned award description will make it difficult for the awards committee to make an appropriate assessment of the candidate):

Introduction
The nominee has developed a disruptive product, Ambient 16 and applied successfully in singleton elderly care in the rural area of Sai Kung, Hong Kong, where elders are commonly excluded socially and physically from the society due to numerous unique challenges listed below. The nominee has astutely deployed Ambient 16 in partnership with Sai Kung District Community Centre (SKDCC) to revolutionize how we connect and care about elderly using AI and data at a very low cost with the human touch from the local community support. This is a remarkable example of how technology and passionate people working together to improve the lives of the poor, old and in need of help and is an honorable and admirable act which leads to very high social impacts and rethink about the needs of the elderly in the world of rapid aging population.

Detailed descriptions

The follow table summarizes the key award criteria, detailed description how this entry meets the criteria and the corresponding supporting pages from PowerPoint (item #1) listed on the section headed "SUPPORTING INFORMATION" to explain in great detail why we believe the nomination is justified.

Key award criteria	Description	Page / Section
1) Made a remarkable and successful effort at providing digital opportunities to those in need	The nominee has successful implemented Ambient 16 to serve in different use cases including 1) singleton elderly in the city; 2) elders with dementia in senior home; 3) active elders in senior home; 4) elders in the single room, isolation room or immobility bed in senior home; and	P88 -104 Proven Solution
	5) single elderly in rural areas of Sai Kung Village. 	P.27-38 Reach the unreachable in Sai Kung Case Study of Mrs. Kam
	All these efforts are aimed to improve the lives of elders in needs as described by the nominee as 1) "improving people's lives with AI" as its company's mission and 2) "to care for those who once cared for us" for elderly care; and 3) using AI and data as the digital opportunities so the families, caregivers and our society to connect, care and understand the needs of the elders.	P.4, P.38 and P108
2) Consider the unique challenges faced by diverse populations	Sai Kung is in the rural area of Hong Kong where 1) local government facilities are insufficient to support or too far away from the 10,000 elders who lives scattered over 110 villages; 2) most of the elders were farmers or fishmen and 60% of them have osteoarthritis so they simply cannot commute (the most vulnerable group); 3) villagers	P.12-16 Unique Challenges

		have low digital literacy and not been benefited much from ICT and they don't even know where to get government support; and 4) so they all badly need in-home care, 24/7 monitoring services and local community support.	
3)	Deployment of ICTs and Internet access among inner city populations, or in towns, rural areas or cities in developing and least-developed countries	Ambient 16 is very easy to deploy. The installation can be done as quick as 5 minutes with 2 - 4 Ambient 16 and a 4G router per apartment. Nominee provides and "paired" the Ambient 16 with the router in advance so the whole system is "plug and play" to save time and simplified the installation process in the elder's home. **Simple (easy to deploy)** Ambient 16 and the Internet connection (4G/Wi-Fi) are all we needed to AI-powered an elderly home. Ambient 16 + 4G / Wi-Fi = Nominee is currently using 4G connection and is planning to use satellite Internet connection when it comes available in 2023 or after (i.e. Starlink) to serve even more remote location of Sai Kung. Bringing connection to remote village is important because 10,000 seniors living in the rural area and scattered over 110 different villages (about 80 seniors in a village).	P.63 Simple (easy to deploy)
4)	Aid people with disabilities and others who face longstanding barriers to social inclusion	Background:	P22-26 Aging in the village

	Most of the elders were farmers or fishmen and 60% have osteoarthritis so they simply cannot commute. Please watch below video from SKDCC which shows the disabilities and barriers the elders are facing in Sai Kung.	
	住在偏遠的地方 https://www.facebook.com/SaiKungPrimaryCare/videos/311339607659038/	
	Nominee demonstrated how Ambient 16 can use AI and data to understand the needs of Mrs. Kam who lives alone and stays in the village most of her time. With AI and data, we can provide better care, better understanding and real time remote monitoring (while in full privacy) to the elders in need.	P.28 - 38 Case study of Mrs. Kam

5) Digital inclusion : ability of individuals and groups to access and use information and communication technologies (ICTs).	Using AI and data as the digital opportunities so the families, caregivers and our society to connect, care and understand the needs of the elders. **Digital Inclusion using AI and Data** The nominee and SKDCC will work together and share data (with consent of elders and their family and anonymously) with social workers, medical professional and the society (i.e. study the behavior of dementia elderly).	P.108
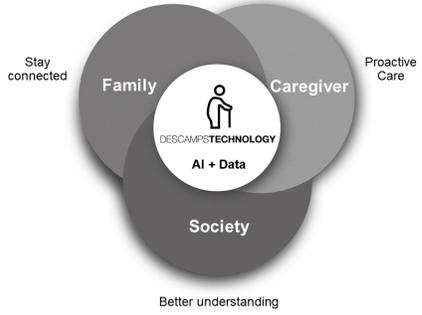
6)	Digital inclusion : availability of hardware and software; relevant content and services; and training for the digital literacy skills required for effective use of ICTs	Ambient 16 is easy to install (hardware) with continuously improvement of AI and functionalities (software). The nominee has astutely deployed Ambient 16 with the help of the team of SKDCC so Ambient 16 can be easily installed. Elders in Sai Kung have long trusting relationship with the people from SKDCC and greatly facilitate the deployment in the rural areas. The full team from both sides are listed on P.107 of the PowerPoint.	P.67-87 Innovative Features and Functionalities P105-107 The People
7)	Enabling accessibility for those individuals who have traditionally not benefited from ICT	This project focuses in particular singleton elderly in the rural areas who need help due to various location, physical health and literacy problems. In the past, the team from SKDCC routinely visits each elder once every 2-4 weeks and have no information or active connection with the elders unless the elders call SKDCC. With the deployment of Ambient 16, SKDCC is able keep remotely monitoring of the elders 24/7 and proactively care about them with the use of AI and data.	
8)	Create meaningful employment through ICT for those who have traditionally been underrepresented in the labor force	Ambient 16 can be made locally in any countries using nominee's automated calibration system which can be operated by a junior engineer. Since the installation of Ambient 16 does not require high level of ICT skill, it can be done by engineering students. The nominee encourages making Ambient 16 locally to create local employment. Although not creating as a "paid semployment", this project at the same time will encourage more volunteers to support singleton elderly in Sai Kung, which is also meaningful work for the volunteers, the elders and the society as a whole. With the 24/7 monitoring (without camera), the nominee and SKDCC also would like to try to find young volunteers living with elders as a way to solve high rent/housing problem in Hong Kong for the	P.64

	young people while having volunteers to look after the elders.	
9) embed inclusion and accessibility in the original design	The nominee had spent over 4 years in research and development of Ambient 16. This original design is developed by the nominee with its unique product design idea, proprietary technology, multi sensing technology, calibration & manufacturing technique, ambient intelligence and AI. Below comparison shows the market product vs Ambient 16. The solution of Ambient 16 increase digital inclusion and accessibility by 1) providing affordable and easy to install solution; 2) leveraging AI and data in elderly care; 3) keeping and respecting the privacy of the elders. 	P.67 – 85 Innovative Features and Functionalities P.5 The Solution

SUPPORTING INFORMATION: Please send any supporting information to the address above, including information from candidate (i.e. excerpt from program description, web site print-out, press release, etc.)

1. PowerPoint in pdf format:
WISTA 2022 Digital Opportunity and Inclusion Award - Descamps - final. pdf (enclosed)

Section	Page
Back ground of the nominee	P.1-6
Back ground of Sai Kung	P.7-26
Case Study: singleton elderly Mrs. Kam	P.27-38
Global Impact/Potential	P.40-58
Scalability	P.59-66
Innovative Features and Functionalities	P.67-87
Proven Solution	P.88-104
The People	P.105-110

2. Brief introduction of Ambient 16 for elderly care
https://www.youtube.com/watch?v=TMsIWJAYhE0

3. Aging in the village (telemedicine project) in Sai Kung
https://www.facebook.com/SaiKungPrimaryCare/videos/311339607659038/

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