Press Release
新聞稿

附件

Techstyle for Social Good 設計大賽 2019 得獎者及作品簡介

（英文詳細資料載於中文簡介後）

獎項：Techstyle 大獎
得獎單位：Amy Yu Chen and Claudia Poh（美國）
作品：Cair Collective

Cair Collective 的設計以人為本，他們為上肢殘障的使用者創造出了嶄新的自動穿衣體驗。他們在裙子中安裝了充氣組件，充氣後令裙子能夠抵抗重力上升，讓裙子自動「穿上」身體。設計團隊邀請了 Christina Mallon 參與設計製作，Christina 手臂癱瘓，過往她一直用腳代替雙手穿衣服。設計團隊設計了一系列五款衣服，讓 Christina 在無需他人協助的情況下仍能自行穿著和脫下衣服。

獎項：Techstyle 特別獎
得獎單位：Hunmin Koh（美國）
作品：The Hands Free Mouse

The Hands Free Mouse 是為有手臂殘疾的人士而設計的無線腳動滑鼠。由於現有針對手臂殘疾人士設計的滑鼠或電腦輸入設備不夠靈巧，加上腿部肌肉不如手部肌肉般發達，使用者用腳掌控時，很容易意外地點擊鼠標。這些產品不但價格昂貴，部分甚至需要特殊的裝置，使用起來也不甚方便。

針對上述問題，這款新的腳動滑鼠採用了踏板輸入設計，增加使用時的靈活性、精確度和舒適度。此外，它的製作過程簡單，經濟又實惠。

獎項：可持續發展大獎
得獎單位：Christine Lew and Florian Wegenast（英國）
作品：Heritage Craft Innovation

Florian & Christine 志力將材料、工藝和可持續性結合。他們希望通過這次比賽探索香港的海洋廢物問題，研究回收海洋廢物，並向本地工藝創作者推介較廢為材的物料，可以用於工藝創作。他們認為廢料研究和工藝協作將有助解決城市的廢物問題，同時可支持和提高大眾對香港本土工藝的認識。

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Press Release
新聞稿

獎項：可持續發展特別獎
得獎單位：Naila Al-Thani（英國）
作品：SEAM UNSEAM

SEAM UNSEAM 的設計意念是利用創新的整合方法製作服裝，延長衣物的壽命和可持續性，以應對現今急速生活節奏下，短消費周期所產生的浪費。用可逆轉的生物合成蛋白質製成的物料代替紡織線來縫合衣服，不僅可以減少製作時間，而且可以消除因使用有害染料和化學品而對環境造成的損害。

獎項：香港最佳設計獎
得獎單位：羅詠欣（香港）
作品：美感・新肢

現時手指截肢者大多數需要訂製既悶熱又重，而且價錢昂貴的矽膠製假手。由於這些矽膠假手會帶來生理上的不適，部分截肢者最後也會放棄穿戴。此外，矽膠假手大多只著重恢復手部外觀，並不能提供活動功能。

美感・新肢利用以先進的三維掃描及打印技術，並同時採用軟和硬的物料製造而成。相對於現有的同類產品，它不但外型美觀，而且重量較輕和透氣度較高，有助截肢者遮掩手部缺失的部分之餘，亦讓他們更輕易和舒適地伸延殘肢，方便指節活動（例如握穩手提電話），從而提升整體生活質素。此設計的最終目標是讓手指截肢者恢復社會和家庭生活，在自我照顧能力上，重拾生活自主權，並為他們創造一個共融、無障礙的環境。

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Techstyle for Social Good International Competition 2019
List of winners and the winning project descriptions

Prize: Techstyle Grand Prize
Winner: Amy Yu Chen and Claudia Poh, USA
Title of project: Cair Collective

The Cair Collective dressing system provides an automatic dressing experience that goes beyond a single user. Remove your assumptions around current systems of dressing and instead, consider the possibility of using air as a means of getting dressed. Using air in inflatable components that are installed in a garment causes the clothing item to rise. This allows the garment to work against gravity for an automatic dressing experience.

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This might seem bizarre in fashion; however, in other fields, there have been the emergence and acceptance of self-driving cars, artificial intelligence, and virtual assistants like Alexa. Cair Collective is the first step towards new possibilities in the fashion world. What if our clothes can do more for us and our body?

Cair Collective's first co-designing experience is with Christina Mallon. Christina has paralysis in her arms but taught herself to use her feet as her hands for the last eight years. We have prototyped and designed a series of five looks that Christina is independently able to don and doff without asking for help from others.

The process of designing universally allows us to cater to those who have been marginalised by the industry. The innovativeness and convenience can also contribute to new ways of dressing for everyone. Cair Collective believes in a fashion future that is human-centric, in which health elements are incorporated into design processes.

Prize: Techstyle Special Prize
Winner: Hunmin Koh, USA
Title of project: The Hands Free Mouse

The Hands-free Mouse is a wireless mouse designed for pedal input. People who have an arm disability are challenged with the majority of computer interfaces that have been developed with hand dexterity in mind. Thanks to modern technology, such as voice input and touch screens, the barriers to using electronics have been reduced, but for precision control that is required for some of the computer applications, it is difficult to surpass the flexibility of the good old mouse and cursor. While there are existing assistive devices that are designed for non-dexterity, the users may at times feel uncomfortable with their use because they are expensive, require a special setup, or draw too much attention to the user.

Most of the currently available types of foot-controlled mice have a separate input apparatus for clicking and positioning. This is because the leg muscles are not as sophisticated as the hand muscles. Therefore it is easy for the user to accidentally click the mouse when moving the cursor. When the foot is partially on the mouse, the heel which is in contact with the ground creates excessive traction force and prevents the cursor from moving smoothly. In order to solve this problem, the device must support the entire foot to reduce the traction forces and withstand the pressure of the leg in its relaxed state at the same time. With a relatively simple modification to an existing wireless mouse, the Hands-free Mouse is a straightforward and affordable type of assistive computer hardware.

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Prize: Sustainability Grand Prize
Winner: Christine Lew and Florian Wegenast, United Kingdom
Title of project: Heritage Craft Innovation

Florian and Christine are collaborating to combine materiality, craftsmanship, and sustainability. They would like to continue their design investigation on the materiality of local waste in Hong Kong through the Competition whilst supporting local craftsmanship. In continuing their exploration of waste glass and stone, they will extend their waste upcycling research to include waste textile fibres. Through these different materials, they will further explore the craft processes, while collaborating with local bars to obtain waste glass, a stone factory in China, textile factories, and local craftspeople, such as metal workers, glass artists and rope makers. Rope making is also a traditional craft in Hong Kong with maritime roots.

By exploring the materiality of waste, Florian and Christine would like to introduce these new upcycled materials to local craftspeople and extend the conversation of upcycling to more creative practitioners. The studio's belief is that their continuation of waste material research and collaboration in the crafts will help to address the city's waste issue, while supporting and bringing awareness to dying crafts that are native to Hong Kong.

Prize: Sustainability Special Prize
Winner: Naila Al-Thani, United Kingdom
Title of project: SEAM UNSEAM

In response to today's fashion that quickly transforms into tomorrow's waste in the fast-paced, short-lived linear cycle of consumption, SEAM UNSEAM is a design project that investigates garment longevity and sustainability through the use of alternative construction methods.

It has been estimated that over 85,000 garbage trucks of textiles end up in landfills daily, 1.7 billion items of clothing go unused in the UK alone, and some items may even be discarded after only several wears. Yet just three times longer use of clothing is the equivalent to a carbon footprint reduction of 65% and water usage reduction of 66%.

By assembling a garment with the use of a reversible biosynthetic protein strip in place of sewing with threads, not only will the construction time be reduced, but the contribution to environmental damage from the use of harmful dyes and chemicals for the threads is eliminated. The current recycling method is a process in which the seams are usually cut from the garment before the garment is shredded, which degrades the fibres. However, with the use of disassembly, the garment can be reverted back to flat textile pieces for return and reuse.

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The Ellen MacArthur Foundation has reported that a circular economy in the textiles industry can be realised with actual garment utilisation which includes emotional durability; that is, when a wearer greatly values a garment because s/he sewed the item him/herself. One of the more effective ways of eliciting emotional durability is through a tailored fit, personalisation, and flexible design.

As the biosynthetic protein strip can be detached and re-attached when needed, and leaves no marks or damage on the fabric, garments can be quickly and easily repaired, altered, or transformed. Creating a more efficient system for disassembly and re-use can extend the life of a garment, as well as challenge the concept that there are limitations to design in order to produce responsible or sustainable clothes.

Prize: Hong Kong Best Design Award
Winner: Wendy Law, Hong Kong
Title of project: Aesthesis - The partial hand accessories for amputees

Most amputees are invisible in society and lack sufficient support. While the market continues to improve on upper and lower limb prosthetics and provide amputees with more functioning upper limbs, a large number of hand/finger amputees are hardly able to secure an appropriate prosthetic that would improve their quality of life and self-esteem.

Hand/finger amputees usually have to customise a glove-like hand prosthesis which is not only stuffy and heavy but also expensive. Many do not even want to wear a silicone prosthesis at all because of the physical discomfort. These thumb prostheses are only for "aesthetics" because they provide a realistic appearance to the hand without allowing controlled finger movement. The 3D-printed prostheses are a less costly option, but the mechanical structure dominates the design, making the prostheses less visually pleasing.

The ultimate goal of Aesthesis is to allow thumb amputees to regain autonomy over life, be it self-care ability or their social and family lives, as well as empower them to have self-confidence and self-appreciation. Aesthesis also aims to create a barrier-free environment.

Aesthesis is a 3D-printed functional aesthetic device on the hand for people who have lost their thumbs. Our finger prosthetic for amputees is a combination of a mechanically active prosthesis and a passive accessory, which is meant to substitute the missing thumbs and enhance the quality of life of hand amputees. In the longer run, Aesthesis strives to provide this customised service at a lower price with greater visual attractiveness.

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