Map showing the impact of an AI device named best design of 2019

the Design Museum
21 November 2019

The Design Museum names infographic and research project ‘Anatomy of an AI System’ by Kate Crawford and Vladan Joler as the Beazley Design of the Year 2019

The project explores the social and environmental impact of owning a voice assistant device – including the amount of human labour, data and resources that are required during the lifespan of just one device

Other winners include MUJI and Sensible 4’s ‘self-driving’ bus for all weather conditions, Korean-influenced sportswear by Jin Won Choi in collaboration with Adidas and CATCH, a low cost HIV detector.

Anatomy of an AI System, a research project and infographic map that brings to life the real-world consequences of voice assistants, has been named by the Design Museum as the overall winner of the Beazley Designs of the Year 2019 and the Digital Category.

Have you ever wondered how your voice assistant is made, and the impact it can have on our planet? Taking the Amazon Echo as an example, the project includes a visual diagram illustrating the global impact of an AI
device across its lifetime. It investigates the three main parts required to build and operate a voice assistant – from the environmental effects of extracting rare earth metals and the wide disparity in workers’ income, to the data that these devices can gather without the users’ knowledge.

Some of the key information highlighted by designers, Kate Crawford of AI Now Institute and Vladan Joler, includes the disparity in wages between a CEO from the industry, earning up to $275 million US dollars a day to a child miner, who would need to work approximately 700,000 years to earn the same amount (as documented by Amnesty International)*. The project questions whether the convenience provided by these devices is worth their social and environmental consequences.

Dr. Paul Thompson, Chairman of the 2019 Judges and Vice-Chancellor, Royal College of Art said:

‘AI is such a prevailing feature of the future of technology it seemed the perfect moment to analyse its impact, which this project does. In the future, when you purchase a piece of digital hardware it could have the ingredients listed. This project shows how this might look and makes everyone who sees it think about all the unseen impact of tech hardware. You will never look at your smart home hub the same way again.’

Deyan Sudjic, Co-Director, Design Museum said:

It’s wonderful to be able to celebrate the winners of the 2019 Beazley Designs of the Year, at the same time as we prepare to welcome our two millionth visitor to the Kensington museum. The Beazley Designs of the Year exhibition brings to the forefront the most revealing, intriguing and exciting new design from around the world and is a vital part of the museum’s programme. It is what makes us the world’s most visited museum of contemporary design and architecture.

The large-scale Anatomy of an AI System map is included in the exhibition.

A video explaining the diagram and the project can be viewed here.

Category winners:

Architecture category winner:

Name: Maya Somaiya Library
Designers: Sameep Padora and Associates

A school library in Kopargaon, north-east of Mumbai in India, uses an ingenious engineering system that pays homage to the Uruguayan engineer Eladio Dieste. The shape of the building is formed by a complex series of arches and double curvatures that take cues from Catalan vaulting techniques while also using some high-tech digital form-finding software. The entirely brick rooms and walls transform the roof into a usable landscape, allowing children to walk and play on top of the library.

Yinka Ilori, 2019 Judge and designer said:

‘We were impressed by this elegant design that was all about community. We felt the space beautifully articulated important purposes – leisure and education. Innovative and unusual, we think this design really breaks the mould for an educational building.’
Digital category winner and overall winner:

Name: Anatomy of an AI System  
Designers: Kate Crawford of AI Now Institute and Vladan Joler  
Nominated by: Mariana Pestana, Architect and Curator  
The consensus among climate scientists is that human activity is the root cause of an ongoing planetary crisis. The way in which everyday decisions and the devices we buy can add to this issue are sometimes difficult to comprehend. Designers and researchers Kate Crawford and Vladan Joler created a map and essay to represent the impact of the creation, use and disposal of just one of the many Amazon Echo units that have been purchased to date.

Martino Gamper, 2019 Judge and designer said:  
'This is a map for how things are built. It is a prototype for re-designing how we understand the impact of tech. We awarded this project because it examines the hidden value behind hardware. The transparency here is incredible. I have not seen AI mapped in this way before. It is honesty of materials applied to technology.'

Fashion category winner:

Name: adidas Originals by Ji Won Choi  
Designers: Ji Won Choi in collaboration with adidas  
This fresh and bold capsule collection of streetwear for Adidas is designed by Ji Won Choi. Drawing on inspiration from her Korean roots, Choi’s first set of garments uses a striking palette of lilac, red, navy and green to reinvent the brand’s iconic three-stripe motif. Her second collection revisits the monochrome colour scheme used in Adidas’ first tracksuit. Choi was influenced by traditional Korean clothing, known as hanbok, that uses exaggerated silhouettes and architectural forms.
Melissa Hajj, 2019 Judge and Director, Product Design, Facebook said:
‘This collection won because it is using a traditional design language in a new way. It’s a rare thing – a genuinely interesting and fresh take on sportswear. It plays with proportion and is a wonderful use of pattern cutting. A very cool collaboration.’

Graphics category winner:

Name: Amorepacific architectural branding
Designers: Sascha Lobe at Pentagram with L2M3
Pentagram worked closely with David Chipperfield Architects to design the architectural branding, environmental graphics and signage for the new Seoul headquarters of beauty and cosmetics company Amorepacific. The signage combines letterforms, numerals and pictograms that refer to the four principal geographical features outside – river, mountain, park and city – with a representation of the building itself to help orientate visitors. Pentagram further responded to visitors’ needs by creating a new typeface, Latin, that solves the challenge of creating visual consistency across the very different written forms of English, Chinese and Korean.

Sarah Douglas, 2019 Judge and Editor, Wallpaper* said:
‘Elegant, economical and clear – we felt this was a worthy winner. Wayfinding is one of the most challenging areas of graphic design to get right and this execution is both exquisite and clever. The simple four-sided map that relates the building back to its surrounding river, mountain, park and city means that you always know where you are in the building. It’s both sensitive to the architecture and highly functional.’
**Product category winner:**

**Name:** CATCH: The HIV Detector  
**Designers:** Hans Ramzan  
CATCH is a low-cost, user-friendly, self-testing device that detects HIV created by British product designer Hans Ramzan. The product is specifically designed for people in emerging nations where easy access to healthcare, education and infrastructure otherwise prohibits early diagnosis. Users can operate the pocket-sized device in three easy steps in privacy.

**Dr. Paul Thompson, Chairman of the 2019 Judges and Vice-Chancellor, Royal College of Art said:**  
‘This product shows how we can change the world with design. This design will be particularly helpful where stigma still exists around HIV and AIDS and where cost is a barrier to diagnosis. This design will help save lives.’

**Transport category winner:**

**Name:** GACHA Self-driving Shuttle Bus  
**Designers:** MUJI and Sensible 4  
A collaboration between minimalist Japanese lifestyle company MUJI and Finnish autonomous driving company Sensible 4, GACHA is a ‘self-driving’ bus that functions under all weather conditions. With no defined front or back, the gently rounded, square-shaped bus will serve regions that have suffered population decline and older citizens who can no longer safely drive. It is now test-driving in three Finnish cities, with a plan for the vehicle to be rolled out in 2020.

**Damien Wilson, Creative Director, Dr Martens said:**  
‘Looks cool and works in all weathers! Launching in 2020, it brings the self-driving trend into reality. You’ve got your phone, you use the app to request the bus and the bus comes! Helpful, efficient and cute.’
Visitors were able to vote for their favourite designs in the exhibition gallery and on the Design Museum website. MySleeve, an add-on to make crutches more comfortable, received the most votes from the public.

**Name:** MySleeve  
**Designers:** Marie Van den Broeck

MySleeve is a silicone cover that is mounted onto a crutch handle to help eliminate sore hands, improve grip and prevent crutches from falling. The comfortable material protects against blisters and provides grip, and the magnet allows the crutches to snap together when freestanding or for the user to pick up a dropped crutch with the other. MySleeve was designed by Marie Van den Broeck, a young Dutch student, in response to her grandmother’s difficulties with crutches.

The six category winners along with the 70 other nominations are on display at the Design Museum until 9 February 2020.

The awards presented at the ceremony are designed by Zak Group.

**Ends**

**NOTES TO EDITOR**

*https://www.amnesty.org/download/Documents/AFR6231832016ENGLISH.PDF  

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**About Beazley Designs of the Year:**  
Now in its twelfth year, Beazley Designs of the Year is an annual celebration of the most original and exciting products, concepts and designers across the globe today. Nominators were asked to select their favourite designs that inspire, represent change in their field and capture this moment in time.

Explore innovations and inventions from around the world that champion accessibility, design for women and local ideas with a global impact. This was the first year that the public nominated alongside design experts.
2019 Judges:
Dr. Paul Thompson (Chair), Vice-Chancellor, Royal College of Art
Sarah Douglas, Editor in Chief, Wallpaper*
Yinka Ilori, Designer
Martino Gamper, Designer
Melissa Hajj, Product Design Director, Facebook
Damien Wilson, Creative Director, Dr. Martens

Beazley Designs of the Year 2019 catalogue is available from the Design Museum shop and online at designmuseumshop.com

OPENING TIMES AND TICKET INFORMATION:
Open daily 10:00 – 18:00 (last admission 17:00)
Free entry to the museum and its permanent collection

Exhibition Prices:
Adult £12.00
Child (6 - 15 years) £6.50
Student/concession* £9.50
Family (1 adult + 3 children) £18.50
Family (2 adults + 3 children) £27.50
Members go free

The Design Museum is the world’s leading museum devoted to contemporary architecture and design. Its work encompasses all elements of design, including fashion, product and graphic design. Since it opened its doors in 1989 the museum has displayed everything from an AK-47 to high heels designed by Christian Louboutin. It has staged over 100 exhibitions, welcomed over five million visitors and showcased the work of some of the world’s most celebrated designers and architects including Paul Smith, Zaha Hadid, Jonathan Ive, Frank Gehry, Eileen Gray and Dieter Rams. On 24 November 2016, The Design Museum relocated to Kensington, west London. Leading architect John Pawson has converted the interior of a 1960s modernist building to create a new home for the Design Museum giving it three times more space in which to show a wider range of exhibitions and significantly extend its learning programme.

The Design Museum’s relocation to Kensington was made possible through the generosity of major donors, trusts and foundations, statutory bodies and corporate partners as well as donations from many individual donors and supporters, including all Design Museum Trustees.

Thanks to National Lottery players, the Heritage Lottery Fund supported the project with a grant of £4.9 million and Arts Council England awarded a capital grant of £3 million.

designmuseum.org
Beazley is proud to partner with the Design Museum and to support the Beazley Designs of the Year.

As a specialist insurer Beazley is well placed to understand the value of good design. It sees first-hand the consequences when things go wrong, and its products and services are expertly designed to assist individuals, communities and businesses when they most need help.

beazley.com

Previous Design of the Year Winners:
2018 Counter Investigations Exhibition by Forensic Architecture
2017 Sir David Adjaye OBE for the National Museum of African American History and Culture in Washington D.C
2016 Better Shelter by Johan Karlsson, Dennis Kanter, Christian Gustafsson, John van Leer, Tim de Haas, Nicolò Barlera, the IKEA Foundation and UNHCR
2015 Human Organs-on-Chips by Donald Ingber and Dan Dongeun Huh at Harvard University’s Wyss Institute
2014 Heydar Aliyev Center by Zaha Hadid Architects
2013 GOV.UK – UK Government website by GDS
2012 London 2012 Olympic Torch by Edward Barber and Jay Osgerby
2011 Plumen 001 by Samuel Wilkinson and Hulger
2010 Folding Plug by Min-Kyu Choi
2009 Barack Obama Poster by Shepard Fairey
2008 One Laptop Per Child by Yves Béhar