Digital Design Weekend

Saturday 22 – Sunday 23 September 2018 10.30–17.00



Digital Design Weekend

A weekend of free events exploring Artificial Intelligence, human-machine interactions, and potential future worlds.

The Digital Design Weekend coincides with *The Future Starts Here* exhibition and the London Design Festival at the V&A.

The Future Starts Here exhibition is supported by Volkswagen Group.

The Artificially Intelligent publication, supported by Mozilla and AHRC/University of Glasgow Digital Transformations Theme, and designed by John Philip Sage, will be available online with free copies distributed during the event.

Events marked with an asterisk are supported using public funding by the National Lottery through Arts Council England.

DISPLAY

Artificially Intelligent*

Room 220, Sackler Centre for arts education Friday 7 September - 31 December Artificially Intelligent explores our complex relationships with technology and AI, provoking questions about the state of these relationships and our interactions with machines.

With: Katriona Beales, Kate Crawford, Vladan Joler, Fabio Lattanzi Antinori, Anna Ridler, Nye Thompson, Caroline Sinders, Maral Pourkazemi and Cecilie Waagner Falkenstrøm.

TALKS & PERFORMANCES

This Happened #29, Liable Algorithms

The Lydia and Manfred Gorvy Lecture
Theatre, Level 4
Saturday 22, 11.30-13.15
Naziha Mestaoui, Tobias Revell and
more discuss real-world impacts of Al
and algorithmic biases. The same way
absolute objectivity doesn't exist, a biasfree Al appears impossible. How does
this information translate itself in fields
such as our criminal system, biology or
the arts? And how do we measure the
impact these biases have on
real individuals?

Design in the Age of Artificial Intelligence*

The Lydia and Manfred Gorvy
Lecture Theatre, Level 4
Saturday 22, 14.00-14.45
Machine learning and robotics are
already used to automate routine
processes, augment human creativity
and enhance user experience. As these
Al techniques develop, what does the
future hold for the field of design? With
Chris Luebkeman (ARUP), Daghan Cam
(Al Build), Phoenix Perry (Goldsmiths
University of London) and Hooman
Shayani (Autodesk). Chaired by Luba
Elliott (Creative Al Researcher).

Katriona Beales in conversation with William Tunstall-Pedoe*

Hochhauser Auditorium, Sackler
Centre for arts education
Saturday 22, 14.00-15.00
Artist Katriona Beales and
entrepreneur and founder of Evi William
Tunstall-Pedoe in a conversation
exploring questions of social justice,
rising inequality and accountability in
relation to the development of AI.

The Work of Art in the Age of Artificial Intelligence

Hochhauser Auditorium, Sackler
Centre for arts education
Saturday 22, 16.00-17.00
Natalia Fuchs and Helena Nikonole
present different views on Al ideas in
art & technology, past and present,
and an interdisciplinary perspective
regarding the future of culture, society,
politics and economics.

Data and Training Sets in an Artistic Practice, Anna Ridler

Room 220, Sackler Centre for arts education

Anna Ridler on using data in her practice and the use of training sets to push notions of creativity within an art context.

The Art of Music in the Digital Age, Beatie Wolfe

Prince Consort Gallery, Room 110
Sunday 23, 12.00-13.00
Musician and Innovator Beatie Wolfe
talks to Elly Parsons of Wallpaper*
magazine about her series of world
first album designs which explore what
music can look like in the digital age.
Followed by a live acoustic performance.

Chance and Control: Art in the Age of Computers

Paintings, Room 88a, The Edwin and Susan Davies Gallery and Prints and Drawings, Room 90, The Julie and Robert Breckman Gallery
Saturday 22, 15.00-15.40
Join Douglas Dodds, Senior Curator of Digital Art, and find out more about computer-generated art from the collection, exploring aspects of chance and control.

Al and Ethics*

The Lydia and Manfred Gorvy Lecture
Theatre, Level 4
Sunday 23, 12.00-13.00
Join our expert panel discussing
algorithmic bias, automated decision
making, and the ethical and social
implications of Al. Speakers include
Ramon Amaro (Goldsmiths University),
Josh Cowls (Alan Turing Institute),
Tabitha Goldstaub (CognitionX).
Chaired by Lucy Sollitt.

Virtual Futures Salon: Radical Visions with Eduardo Kac

The Lydia and Manfred Gorvy
Lecture Theatre, Level 4
Sunday 23, 15.00-16.00
Virtual Futures presents bio-art pioneer
Eduardo Kac for a conversation on
transgenic art and online interventions.

Free, booking required: https://www.eventbrite.co.uk/e/radical-visions-witheduardo-kac-virtual-futures-salon-tickets-46865457846

The Future of Money Award

Hochhauser Auditorium, Sackler Centre for arts education
Sunday 23, 15.30-16.10
The Future of Money is a platform created to develop links between the financial industry and creative practitioners from around the world. This year's awards focus on Artificial Intelligence in the context of payments. Organised by Ahaaa; supported by Consult Hyperion.

Audrey, Amy Cartwright

Fashion, Room 40
Performances at 11.30, 13.30 and 15.30
Moving away from the
anthropomorphic image of robot,
Audrey allows us to think deeper on
the meaning of dance performance
and the possibilities around
introducing nonhuman bodies into
the performance space.
Developed during the Goldsmiths'
Department of Computing and V&A
Digital Programmes Computational
Art Residency.

SHOW & TELL INSTALLATIONS

Nectary, Manuel Jimenez Garcia with Nagami

Grand Entrance Cromwell Road

A modular system able to create an infinite number of morphological variations. Based on three different robotically 3D-printed elements, it can be assembled into a plethora of spaces by following structurally driven combinatorial algorithms.

FRANK - Deus ex Machina, Cecilie Waagner Falkenstrøm*

Medieval & Renaissance, Room 8
The William and Eileen Ruddock Gallery
ARTificial intelligence FRANK is created
using the newest advancements within
machine intelligence. FRANK
will provide personal guidance regarding
existential dilemmas. Don't be afraid
to approach FRANK. He will be
expecting you!

The Heart of the Matter

Medieval & Renaissance, Room 64b
The Simon Sainsbury Gallery
3D printed and kinetic sculptures from
The Heart of the Matter, a project
conceived by artist Sofie Layton and
bioengineer Giovanni Biglino and
developed with health psychologist
Jo Wray bringing together art and
medicine to reflect on the human heart.

Produced by GOSH Arts with Artsadmin; supported by the Wellcome Trust, the Blavatnik Family Foundation, Above & Beyond, Great Ormond Street Hospital Children's Charity, NIHR Biomedical Research Centre at University Hospitals Bristol NHS Foundation Trust and the University of Bristol and using public funding by the National Lottery through Arts Council England.

Supra Systems

Sculpture, Room 21a
The Dorothy and Michael Hintze Gallery
A series of projects and performances
which explore and materialise the
politics of networked technology and
the complex systems that underpin
them. Developed by Supra Systems
Studio; Design School, London College
of Communication, University of the
Arts London.

Cucune: Sustainable 3d printed Furniture

The Raphael Cartoons, Room 48a A great opportunity to experience a live demonstration of 3d printed furniture. Powered by AiBuild

The Face of Movements, Aldo Faisal and Stefanos Zafeiriou

The Raphael Cartoons, Room 48a
A suit that is like having your own
personal neurologist studying your daily

motions could help doctors treat muscular dystrophy.

Vase Forms, Andy Lomas

Sackler Centre for arts education

Vase-like computationally generated sculptures, created using digital simulation of growth processes to generate surprisingly natural seeming, though completely synthetic, complex organic forms. Supported by

Materialise UK Ltd.

Art 3.0, Neil Mendoza

Sackler Centre for arts education
Art 3.0 uses blockchain technology to explore the value of art and introduces a new model for the art market using smart contracts running on the Ethereum blockchain.

Embarrassed Robots, Soomi Park

Sackler Centre for arts education
Embarrassed Robots questions whether
emerging intelligent technologies will
need to adopt human expressions and
emotions in order to integrate better
into our lives. Supported by the Design
Museum and Queen Mary University of
London.

DATA SHOP, Varvara Guljajeva & Mar Canet

Sackler Centre for arts education

A shop-like installation, which speculates with the idea of having a shop that sells and stores personal data. Pen drives containing the artists' personal data from Facebook, Google Takeout, Visa, and Mastercard were canned and labelled as real products. Part of PERRO Project, curated by Javier Galán; supported by the Spanish Ministry of Education, Culture and Sport.

Beholder, United Visual Artists & BOM Lunchroom 2, Sackler Centre for

arts education

An immersive experience which seeks to re-evaluate our understanding of beauty, to see it from autistic perspectives. A unique and bespoke encounter using VR technologies, it serves as a platform to experience an alternate set of stimuli and to hopefully, widen our perceptions. Commissioned by BOM with support from Digital Catapult and Arts Council England.

Open Voice Prototypes, Mozilla Open IoT Studio

Lunchroom 1, Sackler Centre for arts education

The Open IoT Studio has been creating and exhibiting prototype objects for the voice enabled internet in Bangalore, Berlin, Dundee and London. Join them to explore themes of transparency,

interoperability and personality when humans talk with physical objects.

Not-Equal, Network for Social Justice through the Digital Economy*

Lunchroom 1, Sackler Centre for arts education
Drop-in sessions, 10.30-13.00
and 14.30-17.00
Activities to explore everyday smart devices and technologies and help map the impact of smart technologies on issues of social justice. Share ideas and practices for building a DIY guide to digital self-protection using our storyboarding kits.

The Living Room of the Future, BBC R&D

Lunchroom 1, Sackler Centre for

arts education
Under 16s must be accompanied
Do you ever think about how much
technology knows about you and your
loved ones? In the future, how much will
your living room know about you? Join
the BBC R&D and explore a simulated
living room of the future! Delivered
through the Arts and Humanities
Research Council (AHRC) project Objects
of Immersion. A collaboration between
FACT, BBC R&D, Lancaster University,

University of Nottingham, and University

of York. With support from the British

Council and the EPSRC Research Project

PETRAS The Cybersecurity Research Hub for the Internet of Things.

The one who knows, Ben Olsen & Giacomo Piazzi

Lunchroom 1, Sackler Centre for arts education

This terminal-oracle provides a web search based on the ancient algorithm behind the I Ching, answering the question of the user with the answer they were searching for. Project curated by Klimentina Milenova and Interface Culture Department, University Linz; supported by ACF London and Ars Electronica Linz.

WPORTRAITS, Jaime de los Ríos

Lunchroom 1, Sackler Centre for arts education

WPORTRAITS explores the way people represent themselves in the big mosaic of Internet, at the same time it studies how painting tradition's heritage affects our daily life.

Part of PERRO Project, curated by Javier Galán; with support from the Spanish Ministry of Education, Culture and Sport.

The Social Impact of AI, Arianna
Mazzeo - ELISAVA Barcelona School
of Design and Engineering
Lunchroom 1, Sackler Centre for
arts education

A project exploring the importance and role of artists and designers in gaining an understanding of how Al transforms society and its policies by co-designing new distributed models of governance.

Livecoding meets 3D printing: experiments in live computational sculpting, Evan Raskob

Lunchroom 1, Sackler Centre for arts education

3D printing demonstrations 13-45-15.45 LivePrinter combines designing and 3D printing objects. Livecoding is used to control manufacturing precisely and procedurally with real-time flexibility. This system extends digital printing and CNC machining into the realm of performance and has potential in design and science pedagogy.

Britbot, Libby Heaney

Digital Studio, Sackler Centre for arts education

A net-based chatbot exploring British identity. Initially trained on text related to the UK citizenship test, it will gradually learn from the people it speaks to. *Supported by Sky Arts Art5o*.

Object Permanence, Howard Melnyczuk

Digital Studio, Sackler Centre for arts education

This work explores the power of objects,

their documents and their histories by mining the V&A's online archive to interrogate Britain's colonial legacy. Developed during the Goldsmiths' Department of Computing and V&A Digital Programmes Computational Art Residency.

IT IS NOT ENOUGH, Fermin Serrano

Digital Studio, Sackler Centre for arts education

A sound installation as the result of a meta-analysis of citizen science and gender issues. Part of PERRO Project, curated by Javier Galán; supported by the Spanish Ministry of Education, Culture and Sport.

Fuzzy_Logic Machine, Irene Ródenas & Gabriela Gordillo

Digital Studio, Sackler Centre for arts education

A light and sound interface that explores the relations within a system, where digital and human logic are in dialogue. Project curated by Klimentina Milenova and Interface Culture Department, University Linz; supported by ACF London and Ars Electronica Linz.

2 Computers Playing Pong, Diego Javier Alberti

Design Studio, Sackler Centre for arts education

Two PCs make use of a computer vision system to play "Pong", the first commercially successful video game in history. Supported by British Council and +CODE Electronic Art Festival.

Beyond paper, Qian Ye and Melanie Tonkowik

Design Studio, Sackler Centre for arts education

A tangible pop-up book for visitors to interact with. Project curated by Klimentina Milenova and Interface Culture Department, University Linz; supported by ACF London and Ars Electronica Linz.

THE AGE OF FICTION, Vicente Vázquez & Usue Arrieta

Design Studio, Sackler Centre for arts education

A computer application (Bergman) and an electronic display (Kawara) generating in real time a new chronology referring to the time elapsed fiction until the time of inquiry. Part of PERRO Project, curated by Javier Galán; supported by the Spanish Ministry of Education, Culture and Sport.

A New Domestic Collaboration, Laura Dekker

Design Studio, Sackler Centre for arts education

A machine, rhizome-like, has invaded the domestic furniture. It entices you to interact, to stroke it and feed it stimulating things. In response, it begins to express itself.

Affective Futures: Personalise emotionally smart wearables and robots, Affective Futures

Art Studio, Sackler Centre for arts education

Workshops at 15.30 on Saturday 22 and 14.00 on Sunday 23.

A demo and workshop for prototyping and personalising emotionally smart wearables and robots. Toolkit and materials provided. *Limited to 12 participants, on a first come, first served basis.*

Another Intelligence Sings, Amanda Baum, Rose Leahy & Robert Walker

Art Studio, Sackler Centre for arts education
Another Intelligence Sings weaves together sounds from nonhuman worlds, inviting visitors to experience our planetary ecosystems through the generative song of an algorithm. Featuring material from the British Library, Discrepant and more.

Drawing Game, Esther Rolinson & Sean Clark

Art Studio, Sackler Centre for arts education

A live exchange of drawing marks made between artist Esther Rolinson and a drawing machine programmed by artist programmer Sean Clark. In the game, a robot drawing arm and the artist draw onto the same surface influencing each other to build up a body of rhythmic images.

Machinic Doodles, Jessica In

Art Studio, Sackler Centre for arts education
Interactive robotic drawing installation that explores ideas of visual communication. Developed during the Goldsmiths' Department of Computing and V&A Digital Programmes Computational Art Residency.

Spirit spaces, Aesun Kim & Stevie J. Sutanto

Art Studio, Sackler Centre for arts education

A performative embodied interface working through body movement. Project curated by Klimentina Milenova and Interface Culture Department, University Linz; supported by ACF London and Ars Electronica Linz.

Closed Loop, Jake Elwes in collaboration with Ronald Arnoldt

Sackler Centre for arts education
Two artificial intelligence models
converse with each other - one with
words the other with images - in a
never-ending feedback loop. Two
neural networks getting lost in their
own nuances, sparking and branching
off each other as they converse in a
perpetual game of Al Chinese whispers.

As-So, Robert Walker

Sackler Centre for arts education
'As-So' renders two perspectives of
artificial intelligence. Macro and micro
processes are visualised literally but
appear as abstract lines. The macro is
traced by algorithmic trend detection
of asset prices. The micro is the internal
process of a neural network training
on 60000 handwritten numbers
(the ur-data set of image recognition,
called MNIST).

IS3: ejercicio 2, Mónica Bate

Sackler Centre for arts education
A visualization and sonification
analogical machine from the IS3 series
that reads part of an EEG of its author
during a stress crisis. Supported by the
British Council, +CODE Electronic Art
Festival, Vicerrectoría de Investigación
y Desarrollo, Universidad de Chile,

Departamento de Artes Visuales Facultad de Artes, Universidad de Chile, Fundación Flores, TSONAMI Arte Sonoro.

Defective apparatus: It refuses to behave according to its original rules and insists on avoiding people. part 1.1,

Roy Macdonald

Seminar Room 4, Learning Centre, Level 3
A self-learning machine that tries to find the best way to avoid people while constantly changing the delimitation of space and how we interact with it. Developed during the Goldsmiths' Department of Computing and V&A Digital Programmes Computational Art Residency.

Open Studios: Rachel Ara

Residency Studios, Sackler Centre for arts education Sat 22 & Sun 23, 13.00-16.00 Find out about Rachel Ara's research

Find out about Rachel Ara's research into the data and hidden stories the museum holds and experience the holographic mixed reality experience she has incorporated in her site-specific installation The Transubstantiation of Knowledge, on display in our Medieval and Renaissance Galleries.

Generously supported by the Andrew W. Mellon Foundation. Holographic Mixed Reality Experience provided by DoubleMe.

WORKSHOPS

How to Hack a Patent, The Institute of Patent Infringement

The Salon, Europe Galleries
Sift through dozens of Amazon
patents, to redraw and remix them,
creating alternative technological
worlds along the way.

UnBias, Proboscis, Horizon Digital Economy Institute (University of Nottingham), University of Oxford & University of Edinburgh*

The Raphael Cartoons, Room 48a
Drop-in from 12.00-16.00
How do you feel about fake news, filter bubbles, unfair or discriminatory search results and other types of online bias?
How are decisions made online? What types of personal data do you share with online companies and services?
Do you trust them? Explore these through a range of activities, from Being the Algorithm to Creating a Data Garden, and from Public Voting to making a TrustScape of how you feel about these issues. Suitable for families.

V&A Samsung Digital Classroom: Make a bot! with George Buckenham

The Raphael Cartoons, Room 48a Drop-in 1-hr sessions at 10.45, 12.00, 14.00, 15.15 and 16.15 Learn how to make bots with Cheap Bots, Done Quick!, a free tool for making Twitter accounts that automatically generate their own tweets. No programming experience necessary. Supported by Samsung.

New Dreamers, Nye Thompson*

Lunchroom 1, Sackler Centre for arts education
Drop-in sessions from 11.00-13.00
and 14.00-16.30
Explore the emergent machine gaze with artist Nye Thompson. Compare your vision of the world with an Al, or collaborate with one to create a unique cyborg narrative. Suitable for adults & children 10 yrs+

UnBias Fairness Toolkit Educators Workshop, Giles Lane (Proboscis) & Alex Murdoch*

Seminar Room 1, Sackler Centre for arts education
Saturday 22, 11.30-13.30
Algorithms, bias, trust and fairness: how do you engage young people is understanding and discussing these issues? How do you stimulate critical thinking skills to analyse decisionmaking in online and automated systems? Explore practical ideas for using the UnBias Fairness Toolkit with young people to frame conversations

about how we want our future internet to be fair and free for all.

UnBias Fairness Toolkit Industry Stakeholders Workshop, Giles Lane (Proboscis) & Alex Murdoch*

Seminar Room 1, Sackler Centre for arts education
Saturday 22, 14.30-16.30
The UnBias project is initiating a "public civic dialogue" on trust, fairness and bias in algorithmic systems. This session is for people in the tech industry, activists, researchers, policymakers and regulators to explore how the Fairness Toolkit can inform them about young people's and others' perceptions of these issues, and how it can facilitate their responses as contributions to the dialogue.

Spoke: The Design Science Fiction Boardgame, Evan Raskob & Paris Selinas Lunchroom 1, Sackler Centre for arts education Drop-in sessions at 10.00-11.30, 11.30-13.00 and 15.35-17.15 A game for creating interesting and rigorous science fiction stories about current and future topics, like 3D printing. Spoke prompts players to quickly turn rigorous research into compelling narratives about future events. Limited to 16 participants per session, on a first come, first served basis.

The Work of Art in the Age of Artificial Intelligence, Natalia Fuchs and Helena Nikonole

Seminar Room 5, Learning Centre Saturday 22, 10.30-15.30 & Sunday 23, 10.30-16.00

An artistic research and practical workshop in the field of media art in relation to Artificial Intelligence for participants to test specific tools and evaluate conceptual ideas.

Limited to 16 participants.

Artificially Autonomous, Taylor Yasmin

Digital Studio, Sackler Centre for arts education

Drop-in, 15-minute sessions from 10.30-13.00 and 13.30-16.30

Do you feel like the future is unsure? Worried about the rise or potential fall of AI? Join this workshop on how to build your own mini driverless cars. Suitable for adults and children 7 yrs+

Naturewatch

The John Madejski Garden
Saturday 22 ONLY, 2-hr sessions at 11.00
and 14.00. Limited space, first come first
served. Suitable for 9 yrs+
Love wildlife? Learn how to make the
My Naturewatch Camera, as featured
on BBC Springwatch, to help you
capture wildlife in your garden. A
collaborative design re-search project

between the Interac-tion Research
Studio at Goldsmiths University and
Design Products at the Royal College of
Art, supported by the Engineering and
Physical Sciences Research Council.

Naturewatch at the Natural History Museum Wildlife Garden

Sunday 23 ONLY
Explore the NHM Wildlife Garden
through the lens of a My Nature-watch
camera. Try out the kit, find out more
about the project and how to make your
own My Naturewatch camera at home!

DESIGN TAKEOVER ON EXHIBITION ROAD

Sunday 23, 10.00-17.00
Celebrate ten years of London Design Festival at the V&A with a special event on Exhibition Road. Bringing together events by the Brompton Design District, Imperial College, the Natural History Museum, the Science Museum and the V&A, this fun-filled day of design, workshops and talks will offer something for everyone, and a unique way into the many marvels of Albertopolis.

UnBias Fairness Toolkit Workshops, Giles Lane (Proboscis) & Alex Murdoch* Young people (12-22 yrs) 12.00-13.30 Open Sessions 15.30-17.00 What is algorithmic bias and how does it affect you? How far do you trust the apps and services you use in your daily life with your data and privacy? How can we judge when an automated decision is fair or not? Take part in group activities exploring these questions using the UnBias Fairness Toolkit to stimulate and inspire your own investigations.

Can Technology Change the Consciousness of a City?, Abhay Adhikari 11.00

Citizens aren't data points in a passive-aggressive algorithm. Here's how we build a digitally-enabled city with an abundance of empathy.

On Compression, Alex Graves

14.00

Leading artificial intelligence researcher Alex Graves explores the relationship between data compression, prediction, intelligence and creativity.

DDW AT THE ACF LONDON*

*All events taking place at the Austrian Cultural Forum London, 28 Rutland Gate, London SW7 1PQ (please see map below) Curated by Klimentina Milenova and Interface Culture Department, University Linz; supported by ACF London and Ars Flectronica Linz.

Interactive Guided Tours

Saturday 22, 16.30 & Sunday 23, 15.00 (meet by V&A Exhibition Road entrance sign). Duration: 1hr
An interactive, playful tour between the V&A and ACF London to discover installations and explore human-machine relationships.

Installations

Terminal 6, Aesun Kim
How can a machine understand
gestures? A garment that embodies
gestural codes and learns our
body movements.

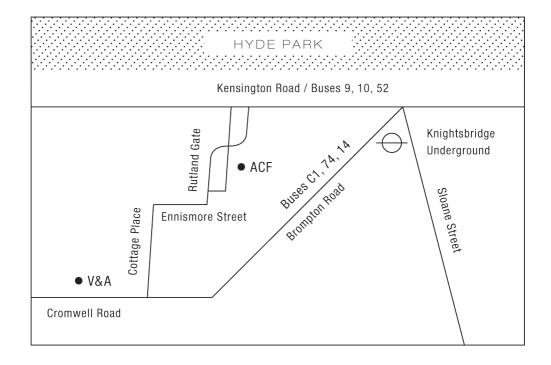
Netz. 2, Jens Vetter A spider's web construction and interactive sound installation that responds to touch.

Arrythmia, Gabriela Gordillo
An ongoing score made out of everyday
life rhythms. Visitors can in-scribe
the frequency of a daily activity in a
time frame of 24 hours.

Performances

Saturday 22, 17.30
An evening of free performances including Netz. 2 by Jens Vetter and Arrhythmia by Gabriela Gordillo.

Workshop: ANDI - Low-Tech 3D Printer, Irene Rodenas Sunday 23, 11.00-13.00 Learn how to build a low-tech 3D printer in this workshop using self-designed modules. Suitable for 12-16 yrs; limited to 12 participants.



Events are free and drop-in, and suitable for all ages unless stated other-wise.

Use #LDF18, #DigitalDesignWeekend to tweet about events

Please note photography and filming will be taking place at these events. Images will be taken for use by the V&A to publicise this event and future digital programmes.

