

BIOPHILIC LAB PRECEDENTS: SELECT LABS, MAKER SPACES, OFFICES, GARDENS & INSTALLATIONS

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Description

Germantown Academy, Innovation Lab and Makerspace

For Germantown Academy, a private preK-12 school in Pennsylvania, 1100 Architect designed the Beard Center for Innovation, a 21st-century learning environment that provides space for collaborative, hands-on learning. Transforming what had been a little-used computer lab and a portion of the library, the renovation offers students and faculty a flexible learning space comprising two areas: an Innovation Lab and a Makerspace. Moveable partitions, custom-designed by 1100 Architect, allow the Innovation Lab to be configured in multiple ways, accommodating individual study, small group collaboration, and larger events such as lectures and robotics competitions. The Makerspace complements other more traditional learning environments, providing a forum for students to test ideas through making and experimentation with technologies like 3D printing and laser-cutting. By stressing transparency, the design creates spaces that visually communicate with one another, resulting in an engaging environment that promotes cross-disciplinary learning.

BEARD CENTER FOR INNOVATION

Fort Washington, PA

Innovation lab, Makerspace

Firm 1100 Architects

2016

<https://www.germantownacademy.net/academics/innovation-special-programs/beard-center>

<http://www.1100architect.com/portfolio-items/germantown-academy/?portfolioCats=31%2C29>



CARNEGIE CENTER FOR GLOBAL ECOLOGY

260 Panama St. Stanford, CA 94305

Ecological Lab

dge-info@carnegiescience.edu

650-319 8904

2018

<https://www-legacy.dge.carnegiescience.edu/>

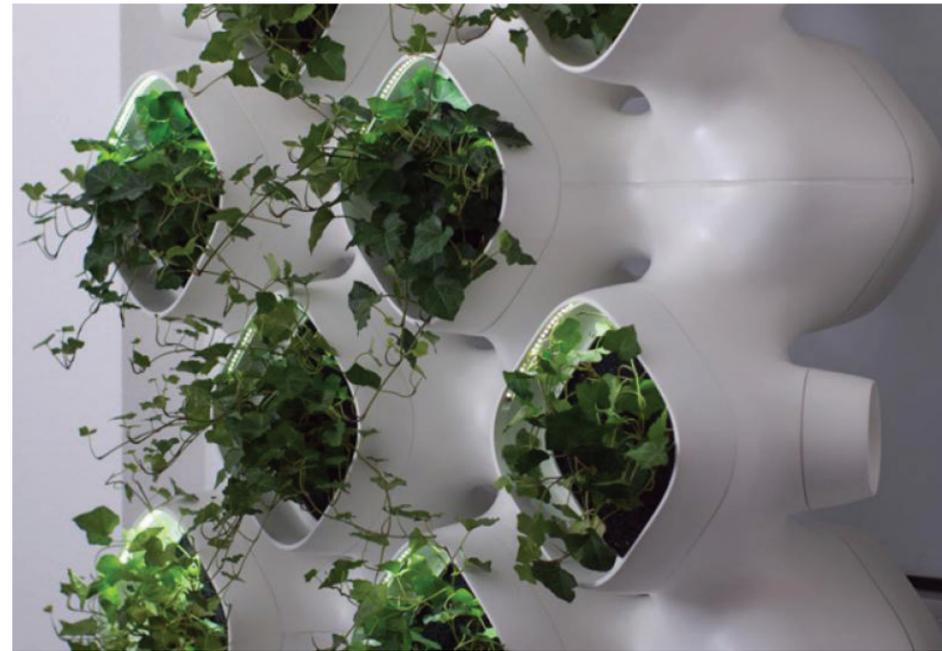
<http://www.carboun.com/sustainable-design/a-california-building-revives-traditional-middle-eastern-designs/>



Description

The Carnegie Center for Global Ecology in Stanford is a research facility that combines Laboratories and office spaces. The 1100 Sqm building was built on a previously developed plot of 7.4 acres. The client's main concerns were lowering the carbon emissions tied to the building's energy use as well as the embodied carbon emissions of building materials. Flexibility over the short and long term was also of utmost importance to the client who wanted to allow for the expansion and contraction of research teams. Like Many of the Climates of the Middle East, Stanford has an arid climate with a long dry summer season, and benefits from northwest breezes. The Design of the Carnegie Center responded to these climatic conditions with a number of passive and active design strategies. These strategies started by orienting the building along the East-West axis with sun horizontal shading provided on the southern facade.

The design of the building applied a mix of natural ventilation and mechanical ventilation, known as mixed mode ventilation, allowing the building to save energy on mechanical ventilation and cooling only in the spaces that need them at the times where natural ventilation was not sufficient. As a general rule, offices were naturally ventilated using operable clerestory windows and ceiling fans, and cooled using a radiant slab, while lab spaces required a higher level of ventilation and cooling and thus resorted to mechanical solutions



CENTER FOR ARCHITECTURE SCIENCE & ECOLOGY

86 34th St. Suite D601 | Brooklyn, NY 11232

Research Design Lab

Designed by SOM

518.276.6466

2013

<https://www.case.rpi.edu/index.php>

https://www.som.com/ideas/slideshows/center_for_architecture_science_and_ecology

Description

The Center for Architecture Science and Ecology (CASE) addresses the need for accelerated innovation of Built Ecologies through the development of next-generation building systems. A multi-institutional and professional research collaboration hosted by Rensselaer Polytechnic Institute, CASE is pushing the boundaries of environmental performance in urban building systems on a global scale, through actual building projects as research test beds.

CASE is a multi-institutional and professional office research collaboration hosted by Rensselaer Polytechnic Institute and located at the Industry City. Through this partnership, the boundaries of environmental performance in urban building systems on a global scale are being tested using actual building projects as test beds.

Multi institutional research collaboration

- High performance green wall
- Facade of the future
- High efficiency solar system
- Kinetic solar facade
- Facade that cleans water
- Active envelopes



CITRIS INVENTION LAB

141 Sutardja Dai Hall, University of California, Berkeley, CA 94720

Design Lab / Maker Space

inventionlab@citris-uc.org

510.664.4448

<https://invent.citris-uc.org/>



Description

The 1,700 ft² Invention Lab is located on the first floor of Sutardja Dai Hall at UC Berkeley and supports 3 major functions.

The Invention Lab offers a variety of prototyping equipment ranging from basic craft tools to electronics workbenches, CAD stations and professional digital fabrication machines. Common prototyping materials and supplies are available for purchase in the lab. Lab staff provides additional guidance and support for design and equipment use. Together, these assets have already helped students turn ideas such as cloud-based car diagnostic devices, smart hydration tracking cups and phone-controlled irrigation systems into functional prototypes

- Learn
- Build
- Launch



ECOLOGICAL DESIGN LAB

Ryerson University School of Urban and Regional Planning, Toronto, Ontario

Ecological Lab

Nina Marie Lister nm.lister@ryerson.ca

416-979-5000, ext. 6769

<https://ecologicaldesignlab.ca/>

Description

The Ecological Design Lab is led by Professor Nina-Marie Lister at Ryerson University's School of Urban and Regional Planning, to test strategies, develop evidence-based next-generation practices, and find tangible, solutions to sustainability and resilience, as we rethink, remake, reinvent and renew our relationship to nature in the city. Creative, evidence-based thinking, community-collaborative planning and informed, inspired design are composite, requisite criteria for active and informed responses to complex socio-ecological problems.

Landscape Connectivity

Roads fragment landscapes, resulting in barriers to the safe movement of humans and animals. Canada's growing urban regions and road networks are associated with increasing wildlife-vehicle collisions and in the long-term, landscape fragmentation can result in habitat degradation a decline in biodiversity. Solving these issues is not solely a technical or research challenge; the solutions requires working collaboratively across disciplines and building political, economic, and cultural consensus. There is an emerging public policy and infrastructural design imperative to find new and creative ways to (re)connect our landscapes in support of the safe passage of humans and animals.

Green & Blue Infrastructure

As existing stormwater infrastructure networks begin to age across North America's urban centres, an opportunity exists to proactively (re)imagine the management of weather impacts in urban spaces at their source. As the effects of climate change and urban growth become increasingly apparent, natural and human-made elements can provide ecological and hydrological functions and processes.

Resilience

Long-term environmental sustainability demands the capacity for resilience—the ability to recover from a disturbance, to accommodate change, and to function in a state of health. What does a resilient world look like, how does it behave, and how do we plan and design for resilience? Despite more than two decades of this research, the development of policy and planning strategies related to resilience is relatively recent. An evidence-based approach that contributes to adaptive and ecologically responsive design in the face of complexity, uncertainty, and vulnerability is needed.



FRAME LAB : THE NEXT SPACE 2018

Klönneplein 1, 1014 DD Amsterdam, Netherlands

Biophilic Exhibition - Frame Award Nomination

February 21-22, 2018

studio@oliverheathdesign.com

+44 (0) 1273 326031

<https://www.frameweb.com/news/nature-knows-best-oliver-heath-on-biophilic-design>

<https://www.frameweb.com/news/discover-the-future-of-spaces-with-the-best-of-the-design-world>



Description

An immersive blend of talks, workshops and multisensorial exhibitions organized in collaboration with interior business association IBA, Frame Lab encapsulates the live judging of the Frame Awards nominees as well as the Awards Show on the evening of 21 February.

The future of the spatial design world will be explored from four different angles in the Me Lab, We Lab, World Lab and Wellness Lab. These four Labs will incorporate objects, materials and technologies in an engaging, informative and inspiring way. Experimentation, curation and multisensorial engagement are key elements as Frame Lab aims to surprise and engage.

Wellness lab - Oliver Heath

Taking a natural approach to workspace design and how this can encourage health, wellness and a deeper human connection.



IED INNOVATION LAB

Barcelona + Madrid

Digital Lab

+34 93 238 58 89

info@iedinnovationlab.com

<https://iedinnovationlab.com/>

<http://yakkaview.com/cool-innovation-labs-around-the-globe/>



Description

The IED Lab provides a new type of design experience and a set of tools for students, companies, neighbours and public institutions in Madrid to come together and create their own projects of transformation. The IED Lab aims to imagine, question, research, explore, experiment, educate and prototype. There are specialised lab units inbuilt into the architecture to create different rooms for different concepts, each equipped with futuristic technology. The multidisciplinary labs include fab lab (for prototyping), media lab (for presenting ideas), XR lab (extended reality including 3D, VR, AR and machine learning), city lab (exploring urban transformation), future food lab (with partnerships with food schools and institutions), and digital design lab (for digital and tech development and transformation).



INTEGRATED DESIGN LAB

Puget Sound 1501 E Madison St, Suite 200 Seattle, WA 98122

Design Lab

Christopher Meek cmeek@u.washington.edu

206.616.6566

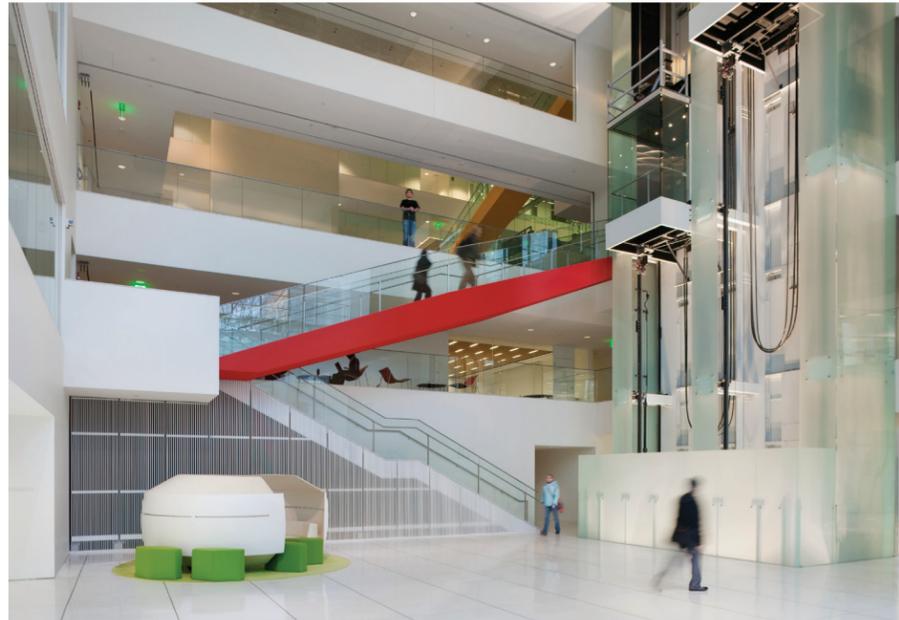
<http://www.idlseattle.com/>

Description

The Integrated Design Lab (IDL) is operated by the Department of Architecture in the College of Built Environments at the University of Washington. The IDL is a self-sustaining organization that includes interdisciplinary faculty, staff, students, professional collaborators, and partner organizations.

Their mission is to discover solutions that overcome the most difficult building performance barriers, and to meet the building industry's goals of moving towards radically higher performing buildings and healthy urban environments. They advance the mission through interconnected research, technical assistance, and professional educational and tour programs.

- Cities and Buildings
- Markets
- Policies
- People
- Building Design Performance
- Health Design
- Daylight and Lighting



MIT MEDIA LAB

77 Mass. Ave., E14/E15, Cambridge, MA 02139

Design Lab

Since 1985

formatted @media.mit.edu

312-281-6900

<http://web.mit.edu/SustainableDesignLab/index.html>

Description

MIT Media Lab is one of the world's leading research and academic organizations. Unconstrained by traditional disciplines, Media Lab designers, engineers, artists, and scientists strive to create technologies and experiences that enable people to understand and transform their lives, communities, and environments.

The MIT Media Lab promotes an interdisciplinary research culture that brings together diverse areas of interest and inquiry. Unique among other laboratories at MIT, the Media Lab comprises both a broad research agenda and a graduate degree program in Media Arts and Sciences. Faculty, students, and researchers work together on hundreds of projects across disciplines as diverse as social robotics, physical and cognitive prostheses, new models and tools for learning, community bioengineering, and models for sustainable cities. Art, science, design, and technology build and play off one another in an environment designed for collaboration and inspiration.

Research and projects developed at the Media Lab frequently grow and evolve out of the Lab, too—as spinoff companies, as exhibitions and performances, as tech transfer to member companies, and, perhaps most importantly, as the basis for continued research and exploration for others, both within Lab and all over the world.

MIT SUSTAINABLE DESIGN LAB

77 Massachusetts Avenue - Cambridge, MA 02139

Design Lab

<http://web.mit.edu/SustainableDesignLab/index.html>

Christoph Reinhart

tito@mit.edu

617-253-7714

Description

Welcome to the MIT Sustainable Design Lab. We are an inter-disciplinary research group with a grounding in architecture that develops design workflows, planning tools and metrics to evaluate the environmental performance of buildings and neighborhoods. Software tools originating from their lab are used in practice and education in over 90 countries.

Mission

The goal is to change current architectural and urban planning practices by developing, validating and testing analysis methods that lead to improved design solutions as far as occupant comfort and building energy use are concerned. The premise of their work is that a more informed design process will lead to better design choices and therefore better performing buildings and cities.

- Climate file analyzer
- Daylight exercises
- Daylight analysis in Rhino/Radiance/Daysim/EnergyPlus
- Radiance material generator
- Energy simulation game
- High Dynamic range photography
- Design Builder
- Glare analysis with Evalglalre

<http://web.mit.edu/SustainableDesignLab/>

MIT DESIGN LAB

At MIT, the Design Laboratory exists within a context of broad-based technological innovation and builds upon the unique advantages offered by this setting. It pursues research, executes practical design and art projects, and engages in scholarship and criticism.

The Laboratory is organized as a collection of multidisciplinary research and project teams unconstrained by the traditional boundaries between the design, planning, and engineering professions and disciplines.

Generally, the Laboratory's projects engage new technologies and their potential to enable fresh and highly effective solutions to problems of significant social, economic, and cultural importance. The Laboratory is particularly interested in the emerging possibilities afforded by: new information technologies; new material, fabrication, and construction technologies; new ways of providing functionality at micro and nano scales; new techniques for engineering biological materials and structures; and new planning and management strategies. They are concerned not only with the design of individual products, systems, buildings, and urban areas, but also with the roles these elements play in larger urban, regional, and global systems and their long-term sustainability.

The Design Laboratory is committed to the highest standards of design quality and pursues its projects within a framework of vigorous debate about related issues of values, ethics, and social justice.

<https://design.mit.edu/>



MxD - MANUFACTURING x DIGITAL

1415 N Cherry Ave, Chicago, IL 60642

Digital Manufacturing Lab

Since 2015, Designed by SOM

info@mxdusa.org

312-281-6900

<https://mxdusa.org/>

https://www.som.com/projects/ui_labs__digital_manufacturing_and_design_innovation_institute_dmdii



Description

MxD (Manufacturing x Digital) is where innovative manufacturers go to forge their futures. In partnership with the Department of Defense, MxD equips U.S. factories with the digital tools and expertise they need to begin building every part better than the last. As a result, approximately 300 partners increase their productivity and win more business.

MxD operates from a nearly 100,000-square-foot innovation center near downtown Chicago. Its factory floor features some of the most advanced manufacturing equipment in the world.

Many partners, including Siemens, Autodesk, and McKinsey & Company, use the floor for experimentation and training on everything from augmented reality to advanced simulation techniques.

Mission

Three federal agencies — Defense, Commerce, and Energy — would stand up a network of manufacturing institutes with the goal of developing new ideas, technology, and methods to strengthen American manufacturing.

- **Projects**
- **Workshop**
- **Testbeds**



Description

In the early 20th century, RISD faculty member Edna Lawrence founded the Nature Lab to “open students’ eyes to the marvels of beauty in nature of forms, space, color, texture, design and structure.”

Today, the Lab still offers unmediated access to authentic natural history specimens, while also fostering creative inquiry into biomimetics, biophilic design, ecology and climate change. High-end microscopes, high-speed cameras and other advanced imaging systems give members of the RISD community access to living and non-living specimens at multiple scales and provide an engaging platform for examining myriad connections between artistic and scientific study.

Mission

The Nature Lab furthers RISD’s hands-on approach to learning by enabling students to investigate ethical, sustainable modes of making informed by natural systems and designed to benefit the environment. Ultimately, it helps everyone who makes use of their resources better understand and articulate the role we play as humans in the ecosystem.

Spaces

- Edna W. Lawrence Room
Room with collection of living plants and animals
- Microscopy and GIS Lab
Micro imaging lab with stereo microscopes, compound microscopes, video microscopes.
- Biodesign Marketplace
Space to test the biophilic design in an educational setting, and to provide a STEAM focused marketplace for working with nature’s technologies.

NATURE LAB

RISD’s Waterman Building, 13 Waterman Street, Providence, Rhode Island, 02903

Biophilic Lab

Since 1920

nature@risd.edu

401.454.6451

<https://naturelab.risd.edu/>

- **Field Connections**
- **Living Systems**
- **Biophilia**
- **Biometric**
- **Imaging + Visualizing**
- **STEAM**



OLIN Labs

Advancing the practice of landscape architecture through research, development, and education.

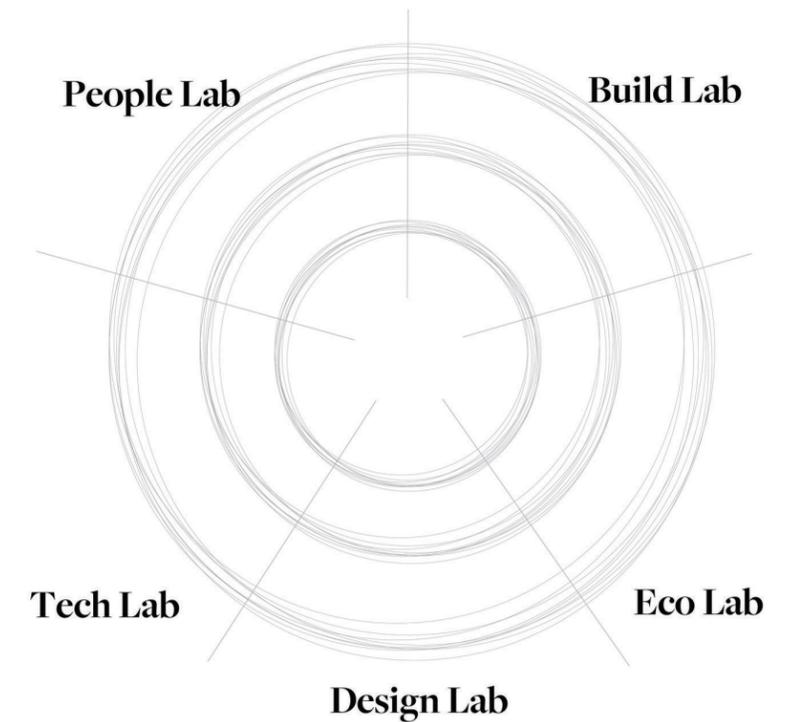
OLIN LABS

Philadelphia, Los Angeles

Design Lab

215.440.0030

<https://olinlabs.com/>



Description

OLIN Labs is a community of practice at OLIN, organized into five interdependent Labs - People, Tech, Build, Eco, and Design. Each Lab is responsible for working across design teams in order to identify larger trends in their project work and within the landscape architecture field. These trends reveal opportunities for deeper education and development efforts, and provide the groundwork for primary research initiatives conducted by Labs. OLIN Labs advances the development of the knowledge, techniques, and tools that benefit our projects, our profession, and the places they engage.

They seek to rigorously and empathetically inform the relationship between the places they design and the people that live with them. Through social science research and education, they serve as a bridge between academia and practice, a resource for project teams, and an advocate for evidence-based design and social justice. Their end goal is to create places that are healthy, equitable, just, well-loved, and well-used.

Design Lab brings all aspects of design to the fore, through office-wide charrettes, cross-team project critiques and topical happy hour events in which project teams share design inspiration, lessons-learned and opportunities for design innovation.



PACIFIC NORTHWEST NATIONAL LABORATORY

Puget Sound 1501 E Madison St, Suite 200 Seattle, WA 98122

Design Lab

Suresh Baskaran suresh.baskaran@pnnl.gov

(509) 375-6483

<https://www.pnnl.gov/>

<https://tvaarchitects.com/projects/pacific-northwest-national-laboratory-collaboration-center>

Description

PNNL advances the frontiers of knowledge, taking on some of the world's greatest science and technology challenges. Distinctive strengths in chemistry, earth sciences, and data analytics are the heart of their science mission, laying a foundation for innovations that improve America's energy resiliency and enhance their national security.

It's a national lab with Pacific Northwest roots and global reach. Whether the researchers are unlocking the mysteries of Earth's climate, helping modernize the U.S. electric power grid, or safeguarding ports around the world from nuclear smuggling, they accept great challenges for one purpose: to create a world that is safer, cleaner, more prosperous, and more secure.

- Cities and Buildings
- Markets
- Policies
- People
- Building Design Performance
- Health Design
- Daylight and Lighting



PIET HEIN EEK LABORATORY & WORKSHOP

Halvemaanstraat 30, Eindhoven

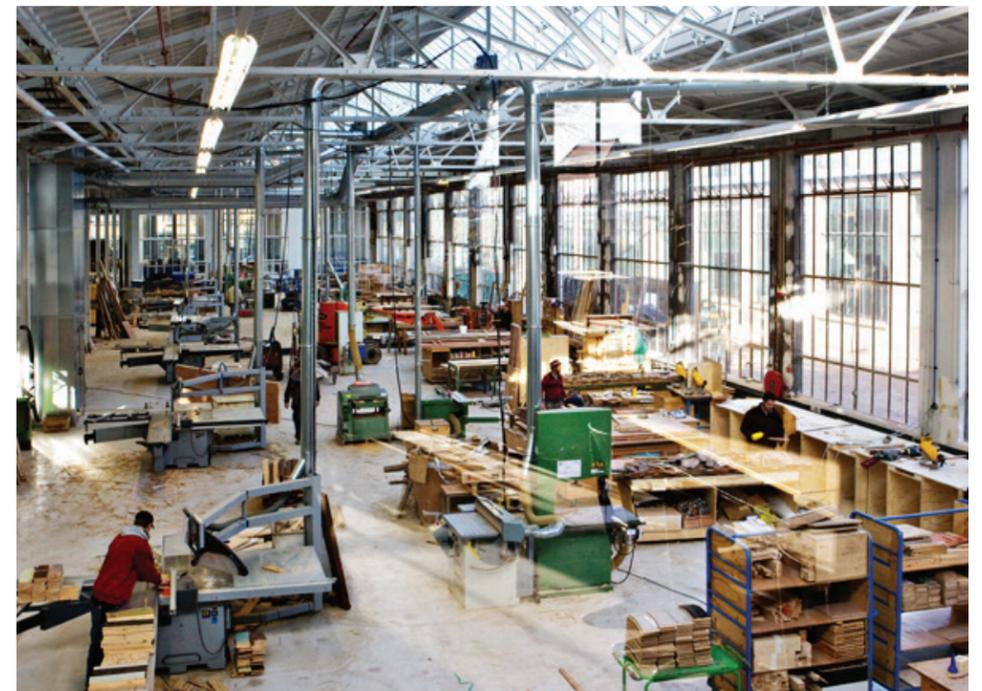
Furniture Lab, maker space

info@pietheineek.nl

31 (0) 40-2051100

<https://pietheineek.nl/en>

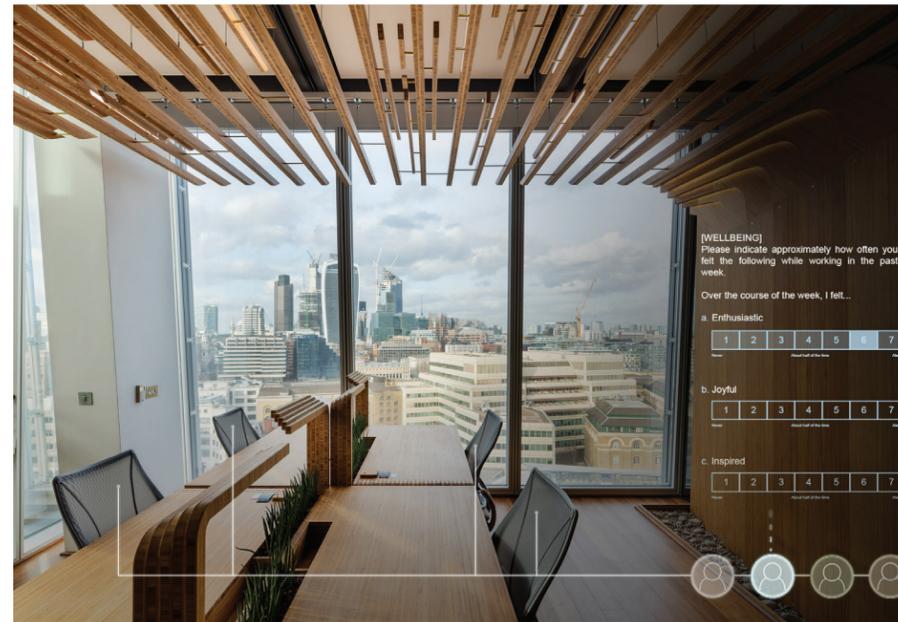
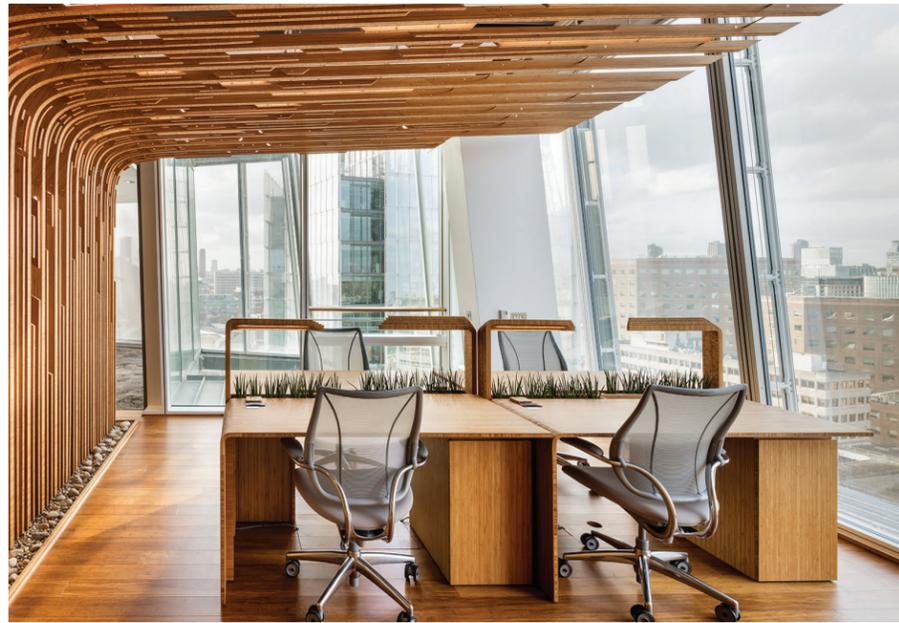
<https://sofiliumm.wordpress.com/2011/11/29/piet-hein-EEK-showroom-lab-shop-restaurant-workshop/>



Description

In a former industrial complex in Eindhoven, Piet Hein Eek new space is a mix of laboratory, workshop, showroom, shop and restaurant. Redesigned to measure its desires, the 10,000 square meters (108,000 Sqft) space is a dream for any art and furniture lover.

The workshop is the heart of the company, where 50 people produce Piet Hein Eek furniture for the whole world. All spaces are divided with walls of glass and metal beams recycled from old buildings demolished.



Description

DaeWha Kang Design has created an experimental work environment on the 12th floor of the Shard that has the express purpose of measuring the impact of biophilic design on worker wellness and productivity.

Working in collaboration with Mitie (the client), and Dr. Marcella Ucci (head of the MSc in Health, Wellbeing and Sustainable Buildings at the University College of London), the designers have created not only a physical space, but also a pilot study to measure the impact on employees in a detailed post-occupancy study.

Biophilia refers to human beings' innate need for a connection with nature. Human physiology is wired to seek qualities of light, view, material, and other factors common in the natural world. This project comprises two spaces designed according to those principles: a "Living Lab" that functions as an immersive work environment, and two "Regeneration Pods" that provide short-term rest and meditation functions for the Mitie employees.

Mitie employees worked at these desks for four weeks at a time, answering daily surveys about their comfort, satisfaction, and emotional response. They then spent four weeks working in a control area on the same floor with similar environmental conditions but without biophilic design, and their responses were compared between the two spaces.

SHARD LIVING LAB

32 London Bridge St, London SE1 9SG, United Kingdom

Biophilic lab

Since 2017, Designed by Daewha Kang Design

info@daewhakang.com

+44 7540-643-663

<https://www.daewhakang.com/project/the-shard-living-lab/>

<https://www.treehugger.com/interior-design/living-lab-regeneration-pods-daewha-kang.html>



SPACE 10

1711 Copenhagen, Denmark

Design Lab

45 3175 0806

discover@space10.com

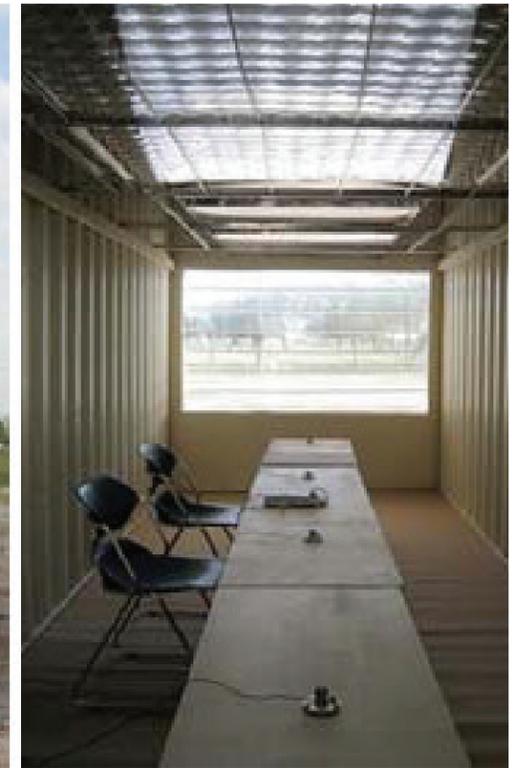
<https://space10.com/>

<http://yakkaview.com/cool-innovation-labs-around-the-globe/>



Description

SPACE10 is actually the brainchild of Swedish icon IKEA, who created the lab to enable a better, more meaningful and sustainable life for many people through home design. Research and innovative design solutions are created to challenge some of the major societal changes expected to affect people in the years to come. SPACE10 does this in collaboration with an ever-growing network of forward-thinking partners. SPACE10 offers lectures across their website to those who are interested, whilst also acting as a trial and test space for new living ideas like flat pack green walls and hubs, self-driving food banks and technology within the household. Hydroponic farming and voice command gardens are also tried and tested within SPACE10. A recent hydroponic growth experiment grew herbs and plants 3 times faster through stackable trays, a climate-controlled box and LED lights that allow continuous growth. Did I mention no soil was used, and only about 10% of water compared to traditional gardening methods was needed. Now that's innovation.



Description

- Daylight analysis
- Full scale mock ups
- Research projects

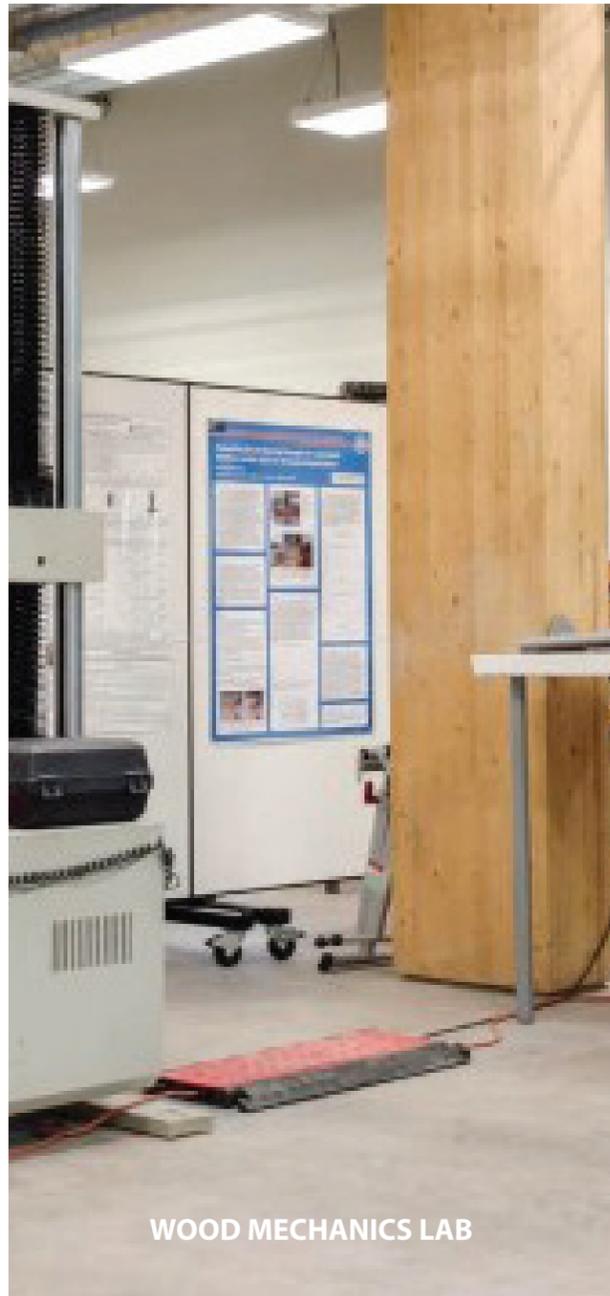
TEXAS A&M UNIVERSITY DAYLIGHTING LAB

College of Architecture, Texas A&M University, College Station, TX

Design Lab

(979) 845-6545

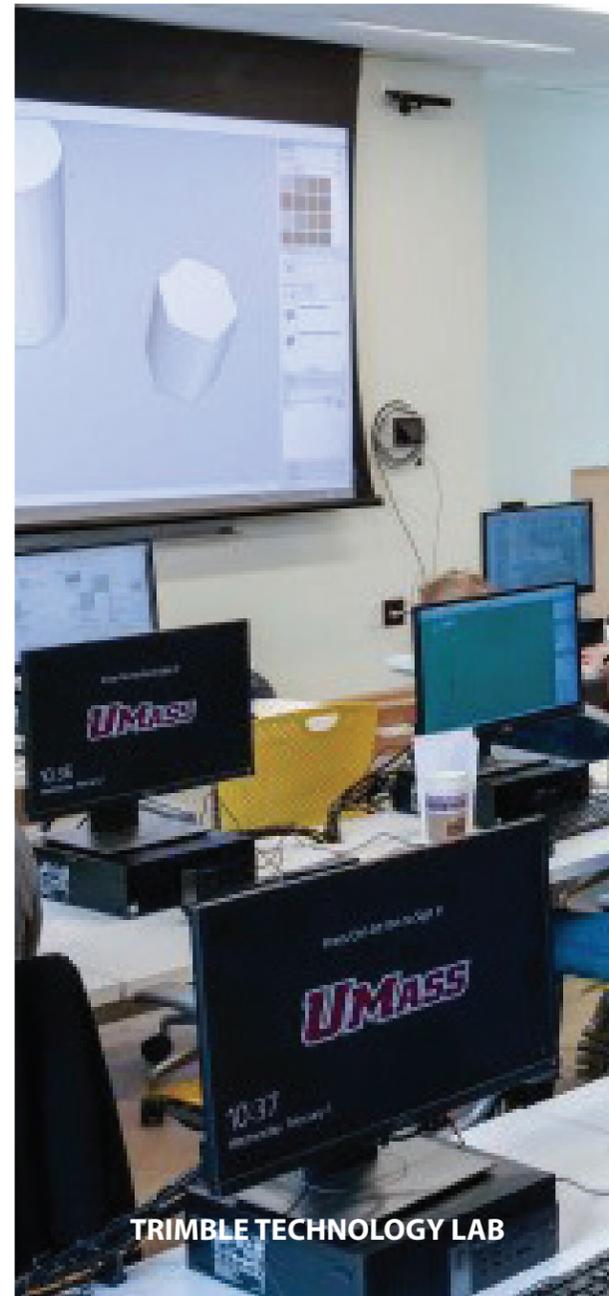
<https://research.arch.tamu.edu/daylight/>



WOOD MECHANICS LAB



BUILDING SCIENCE LAB



TRIMBLE TECHNOLOGY LAB

University of Massachusetts Amherst have 3 labs:

1. Wood Mechanics Lab

Established in the early 1960's by Dr. Alan Marra and Dr. Bruce Hoadley, the lab originally focused on wood adhesives and wood chemistry. Over the past 20 years, however, the lab has changed focus to structural materials, building components, and bio-based products testing, including non-wood products such as structural bamboo

Peggi L. Clouston Associate Professor
+1 (413) 545-1884
clouston@umass.edu

2. Building Science Lab

Established in 2008, the Building Systems Lab provides both an open-space laboratory as well as a graduate research space for researchers and students who investigate building energy performance, building systems, and building assessment.

Benjamin Weil, Extension Assistant Professor
+1 (413) 545-1820
bweil@eco.umass.edu

3. Trimble Technology Lab

Established in 2016 through a generous gift by Trimble Inc., this lab expands the University of Massachusetts Amherst's leadership in training and research in 3D building design, digital fabrication and the sustainable built environment. Partnering with Trimble allows UMass Amherst to more fully integrate across its curricula the technological tools that are rapidly transforming how building and living environments are designed and constructed.

Alexander C. Schreyer Senior Lecturer
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schreyer@umass.edu

UMASS AMHERST

University of Massachusetts, 210 John W. Olver Design Building, Amherst, MA 01003-2901

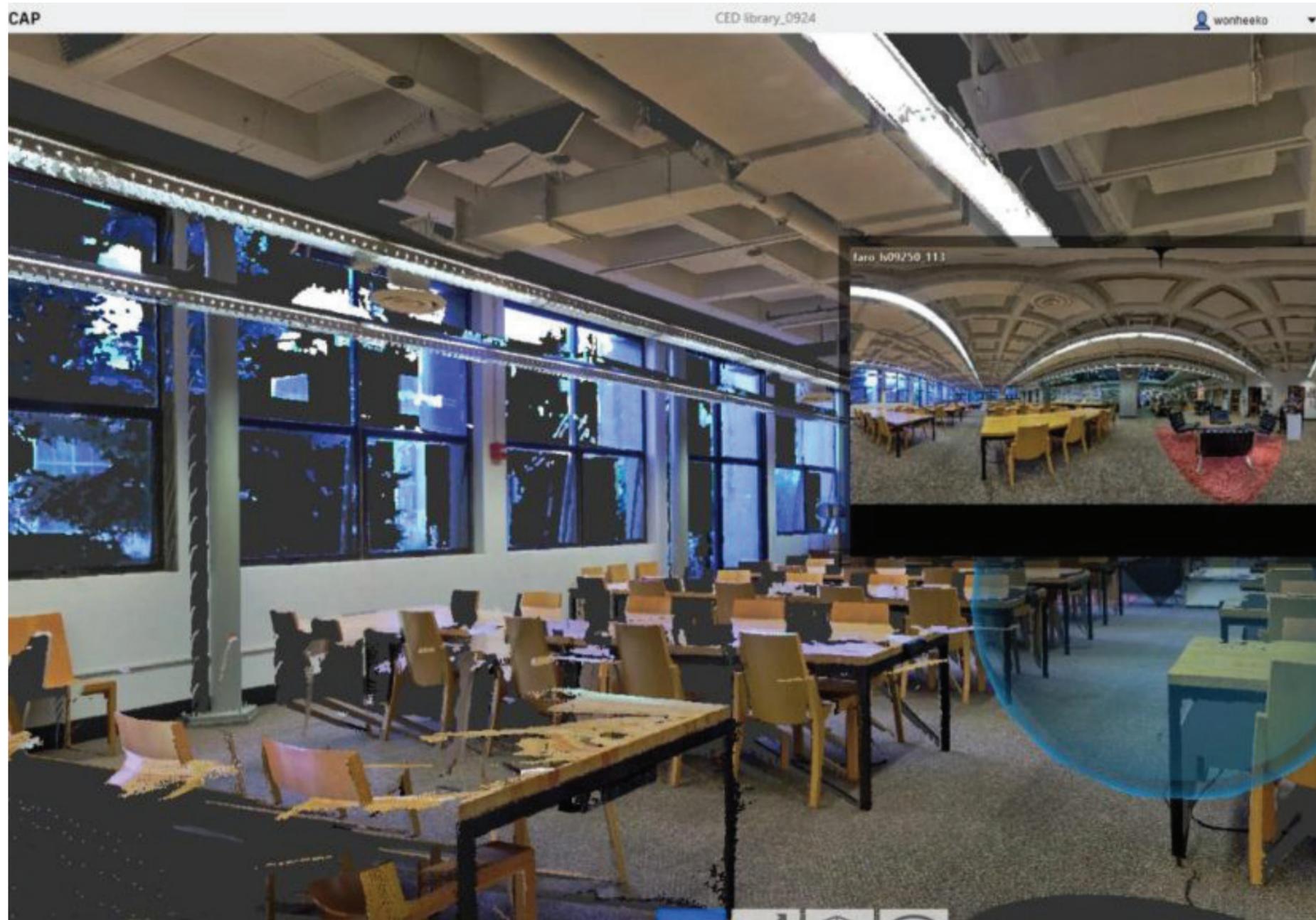
University Design Lab

University of Massachusetts

1960 - 2008 - 2016

<https://bct.eco.umass.edu/research/facilities/>

<https://bct.eco.umass.edu/tag/building-science-lab/>



XR LAB BERKLEY

Wurster Hall, Berkeley, CA 94720

Virtual / augmented and mixed reality lab

Since 2017

Luisa Caldas lcaldas@berkeley.edu

510-289-7792

<https://xrlab.berkeley.edu/>



Description

In response to the emergent fields of spatial computing and immersive environments, the XR Lab was created by Luisa Caldas in 2017, at the UC Berkeley College of Environmental Design. Their goal is to develop innovative, impactful research and applications in VR/AR/MR by establishing collaborations with industry partners and academia.

The XR Lab is founded on the premise that immersive environments will be the next pervasive platforms for communications, entertainment and work. In this context, current hardware will progressively be replaced by non-intrusive interfaces that seamlessly merge into daily life. Virtual, augmented and mixed reality will likely have vast implications across society, with horizontal disruptive impact.

The XR lab is currently active in the fields of architecture and urban planning, healthcare, sustainability and climate change, ADA research, human-computer interfaces, UI/UX, new media and narrative/storytelling research. The Lab has also developed unique methods for parametric and generative design and the execution of scientific simulations inside immersive environments. New research interests include telepresence, collaborative environments, and high-definition space capture.



Description

The Materials Library collection is organized by material type and cataloged to provide information about an item's manufacturer, composition, properties and industry applications. Located on the 2nd floor of the main building on CCA's San Francisco campus, between S-16 and the DCC. The collection is displayed for easy browsing, and most samples may be checked out by students and faculty.

The collection features material samples reflecting current building and design markets with a particular focus on smart, emerging and sustainable materials and technologies. They are continually acquiring new and innovative samples.

In development since 1999, the resource center was funded by three major grants from the George Frederick Jewett Foundation (for a total of \$75,000).

Services

- Instructional Services & Technology
- Circulation Services
- Emerging Projects

CCA MATERIAL LAB

Oakland (5212 Broadway) San Francisco (1111 8th St)

Material Lab

1999

Oakland (510-594-3658)

San Francisco (415-703-9574)

matlib@cca.edu

<https://libraries.cca.edu/collections/special-collections/materials-library/>



MATERIAL DISTRICT

NAARDEN, NETHERLANDS

MATERIAL LAB

+31 (0)20 713 0613

info@materialdistrict.com

www.materialdistrict.com



Description

MaterialDistrict is the world's leading match-making platform in the field of innovative materials. MaterialDistrict's value as a high-end materials inspiration source is clear: R&D and design professionals of all industries are using their platform to discover new material solutions. Daily via MaterialDistrict.com, annually at MaterialDistrict Rotterdam and periodically throughout the year with traveling MaterialDistrict Expo, MaterialDistrict Talks, and MaterialDistrict Pop-Up events.

RECENT PROJECTS

- Table made of murano glass and metal waste
- Turning plastic back into oil
- Shelter made of wood and recycled materials
- Metal infused lumber that is resistant to water and mold
- Furniture made from recycled polycarbonate waste
- Watch made out of ocean plastic

Upcoming Events - Material District Expo Fantastic Future

At ARCHITECT@WORK Luxembourg, MaterialDistrict shows beautiful recycled plastic with its own identity from the Netherlands, quirky tiles made from waste material from Spain, acoustic panels of 100% biobased pulp from Sweden, or lightweight panels made with Belgian salt. Express yourself with these materials from the future.



MATERIAL DRIVEN

London, UK Dallas, TX

Material Lab

Founder - Purva Chawla

purvac@materialdriven.com

2016

[https://www.materialdriven.com/?fbclid=IwAR1BTPWneFO6uygatWXzkHWR5ueF0DxdQISfhgCVu9WrQwcdBCXx-](https://www.materialdriven.com/?fbclid=IwAR1BTPWneFO6uygatWXzkHWR5ueF0DxdQISfhgCVu9WrQwcdBCXx-MvXIMUI)

MvXIMUI



Description

With a curated range of 300+ materials in their collection, their expertise lies in locating and sourcing innovative materials, as well as understanding their applications, and impact across industries. This growing collection serves as the basis for strategic projects and connections that we enable– between the developers of new materials, at all scales, and those seeking to learn about and apply them.

MaterialDriven is based in London, UK and Dallas, Texas, led by partners Purva Chawla and Adele Orcajada.

Services:

- Consultation for Architecture, Interior, Product, Fashion, Packaging, Real Estate
- Educational services for Universities, Museums, Schools and Institutions
- Curating Exhibition Design

Recent Projects:

A new age of paper
 From filters to tables, ceramic foam
 From chrome to stainless steel
 The future of waste based materials
 Silicone re imagined



MATERIAL EXPERIENCE LAB

Faculty of Industrial Design Engineering, TUDelft, Landbergstraat 15, 2628 CE Delft, The Netherlands

Department of Design, Politecnico di Milano, Via Giovanni Durando, Milan, Italy

Material Lab

2003

Elvin Karana (TUDelft) Karana@tudelft.nl +31 (0)15 27 85726

Dr. Valentina Rognoli (Politecnico di Milano) Valentina.Rognoli@polimi.it +39 340 4050582

<http://materialexperiencelab.com/>



Description

Materials Experience Lab is a cross country research group bringing together researchers/practitioners who introduces unique ways of understanding and designing (with) materials to radically change and enhance the relationship people have with materials and artifacts. The Lab is committed to opening up new territories for material and product design and disseminate research findings through exhibitions, scientific publications, public debates, etc., with the aim of federating and supporting the research community (see, for example, the recent international conference, Alive. Active. Adaptive., that they organised under the Design Research Society (DRS) Special Interest Group on Experiential Knowledge (EKSIG 2017))

The main research activities of the Lab are coordinated by Elvin Karana and Valentina Rognoli. The core team consists of researchers/practitioners who actively work on a specific project under the Lab.

Focuses

- Recycled materials
- Smart materials
- Bio based materials



MATERIO

8 rue Chapel. Paris, France

Material Lab

+33 1 40 82 98 48

hello@materio.com

2001

www.materio.com



Description

MATERIO was created in 2000 by a young French team curious about science, industry, matter, design and innovation. Funded during its birth by a patron Santa Claus (Yvon Poullain), MATERIO is above all a watch service on innovative and unique materials for architects, designers and other creators of all stripes. Their teams constantly identify innovations and material singularities all over the world, independently choose the strongest elements to reference, invite selected manufacturers to provide samples, so that service members can see, touch, play with these thousands of materials, in different physical material libraries around the world (today Paris, Brussels, Prague, Bratislava).

MaterO is your tool for innovation AND inspiration. They believe that innovation can arise from your encounter with new materials, according to your desires and the projects you have in mind. Stroll through the database or in one of our showrooms, this can only be surprising and fruitful.

- A selection of thousands of specific and/or innovative materials and technologies.
- A complete independency. No advertisement, no financial links with the indexed manufacturers, matériO is ONLY financed by its users.
- An international online database and several showrooms in the world.
- Any kind of materials (wood, plastic, metal, glass, lighting devices...), any field, to be freely inspired by materials.



Description

This project is to make a new office for 500 staff of the rapidly growing company to expand their business. Staff is mainly young Vietnamese and multinational engineers, the company is filled with energy and has a friendly and unconstrained atmosphere. The space was designed aiming to stimulates creativity of the staff working in such a young and energetic company. It consists of 5 floors of working place and one communal floor for events, meetings and breaks.

The room was designed to represent the company's energy and uniqueness in a bold way. The lawn mound works as seats at an event, lounge to relax and meeting place in an intimate atmosphere. The undulating lawn ground and living plants stand up from it gives a sense as if being in a park or a field.

07BEACH + STUDIO

Ho Chi Minh, Vietnam

Innovative Office Space

Firm07BEACH, Studio Happ

2017

<https://www.archdaily.com/889042/office-design-in-ho-chi-minh-city-07beach-plus-studio-happ>



BIOFILIA OFFICE

Itaim Bibi, Brazil

Biophilic Office

Firm IT'S Informov

2019

<https://itsinformov.com.br/projetos/sede-its-informov-6oandar-biofilico/>

<https://www.archdaily.com/920540/its-biofilia-office-its-informov>

Description

IT'S Informov, an architecture, engineering and design company for the corporate sector, expands its headquarters in São Paulo with a space that complements the other 2 thousand square meters office, inaugurated last year. The differential is the Biophilic design that integrates nature elements to the companies' environment, aiming to increase the employees' productivity and well-being.

"We follow the main tendencies in the market and understand that our house must be a showroom with the latest architecture and design concepts", explains Marcelo Breda, IT'S CEO. The company has over 27 years of activity in Brazil. Biophilia goes beyond the inclusion of plants in the office. It's a new mindset for corporate projects with a focus on the user, in this case, the employees. The biophilic design uses elements like lighting, ventilation, textures, colors, and shapes to compose an environment that promotes interaction and contributes to the team's comfort.

A study on the theme by Interface, a global commercial flooring company and IT'S provider, revealed that people who work in spaces with nature components register a level 15% higher on their well-being, are 6% more productive and 15% more creative. The use of Biophilia is in agreement with IT'S proposal to deliver more human projects, prioritizing people. "Is necessary to consider the human aspect in each step of the work's planning and execution, putting people who will actually enjoy the space as main figures", explains Breda.



CAPITAL ONE LAB

San Francisco, California

Innovative Office Space

Firm Studio O+A

2018

<https://yourlearningorganisation.com/2014/08/14/cool-offices-capital-one-lab-studio-oa/http://www.i-mad.com/>

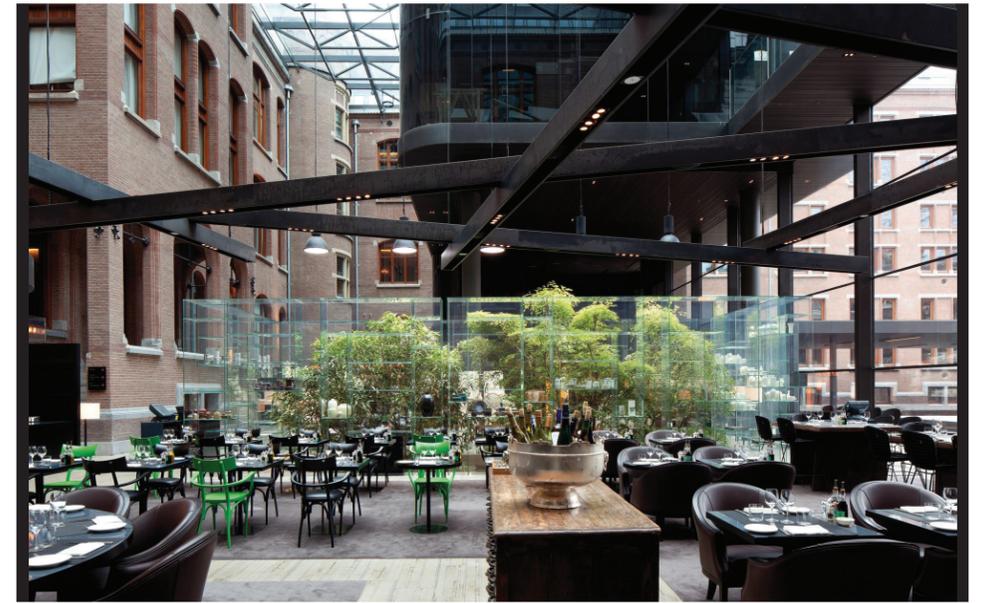
<https://o-plus-a.com/project/capital-one-labs/>

<https://www.archdaily.com/533462/capital-one-lab-studio-o-a>

Description

Studio O+A designed the training space for Capital One, located just upstairs from the bank's coffee house retail concept in downtown near Union Square in San Francisco. The Capital One Lab aims to help bank employees use design thinking to solve management challenges in banking.

Studio O+A designed the training space for Capital One, located just upstairs from the bank's coffee house retail concept in downtown near Union Square in San Francisco. The Capital One Lab aims to help bank employees use design thinking to solve management challenges in banking. Color was just one aspect of a playfulness that extends throughout the design. Responding to the client's request that the new space include a place to rest, O+A went beyond a soft couch to create an elevated sleeping nook that is one of the central features of the space.



CONSERVATORIUM HOTEL, AMSTERDAM

Paulus Potterstraat 50, 1071 DB Amsterdam, Netherlands

Innovative Open Space

Firm Lissoni Associati

2006-2012

<https://www.lissoniassociati.com/en/architecture/hotel-resorts/conservatorium-hotel-amsterdam/36>

Description

The Conservatorium Hotel occupies the site of Amsterdam's former music conservatorium, built in the 19th century. The original gothic feeling of the building was left unchanged while new elements, such as the covered glass courtyard, were inserted to create a contrast between antique and modern.

2012 "The Golden Feniks National Renovation Award"

2013 Honorable Mention Travel+Leisure "Design Awards for Best Large Hotel"

2014 Winner "Meilleure architecture intérieure d'hôtel en Europe", Prix Villégiature

2014 Winner "Inspiring Design", The Style Junkies



DESERT ROUTES OFFICE

Boulevard Plaza, Dubai, United Arab Emirates

Biophilic Office Space

Firm BIA Design Studio

2016

<https://officesnapshots.com/2016/11/18/desert-routes-offices-dubai/>

https://www.lovethatdesign.com/project/desert-routes-boulevard-plaza-dubai/#photo_15

Description

The Desert Routes office is one of BIA's most special projects. Not only was it designed to be a versatile workspace with a vibrant working environment, it was also treated as work of art. Almost every piece of furniture in the office is uniquely designed by artist/architect Ana D'Castro and can be a sculpture on its own. Materials like Steel, Exotic blue marble from Brazil and polished concrete were used side by side to give the office a modern, bespoke design and the warm wooden floor was chosen to contrast the solid materials and make the environment more cozy. Greenery was also introduced on the main wall of the office as well as the partition in the center to add more life to the space and help in creating a more efficient working environment. Also, the fully glazed walls were utilized by the whole space. As can be seen in the pictures, No full height or solid partitions were used in order maximize the amount of natural daylight and reduce energy consumption



GOOGLE OFFICE DUBLIN

Zurich, Switzerland

Innovative Office Space

Firm EVOLUTION DESIGN

2013

<https://www.architonic.com/en/project/evolution-design-google-campus-dublin/5104124>



Description

Google Ireland opens the doors to its thriving new campus: Four buildings located in the heart of Dublin's historic docklands district! With over 47'000 m2 of unique office space, the campus represents an amazing workplace for Google's ever growing sales, marketing, finance and engineering teams, coming from more than 65 countries and speaking over 45 languages.

For the Masterplan the architects had to find a smart solution for the nearly impossible – to create a stimulating and interactive campus within a bustling environment in the midst of the inner city. Apart from innovative office spaces, the Masterplan required the successful organisation of a multitude of additional functions, such as 5 restaurants, 42 micro kitchens and communication hubs, game rooms, fitness center, pool, wellness areas, conference, learning & development centre, tech stops, over 400 informal and formal meeting rooms and phone booths, etc.

ENVIRONMENTAL SUSTAINABILITY

Sustainability is a key focus area for Google and indeed all Google real estate projects work to LEED accreditation. The Google Dublin Campus is currently awaiting the prestigious LEED Gold and LEED Platinum certification.



HANOI CREATIVE CITY

Trung, Hà Nội, Hanoi, Vietnam

Co working Space

https://www.facebook.com/pg/hncreativecity/about/?ref=page_internal

<http://yakkaview.com/cool-innovation-labs-around-the-globe/>

Description

Nestled in the outskirts of Hanoi, just a few blocks away from the city's Red River, Hanoi Creative City is a 20-storey high rise complex which has been given completely to arts and culture. If you catch an elevator up to the top level and work your way down, you'll be surprised to find that each floor is completely different to the next, whether it be a smoke and laser installation, creative boardroom or Japanese tea house. Our very own Yakkazoo designer, Kai Faulkner, had the pleasure of working at Hanoi Creative City for two months, and described the concept as excellent. It has a great startup culture, packed with energy and people who work extremely hard. And what's better is that there's amazing Vietnamese coffee nearby. The whole experience is just cool, for lack of a better word.



MICROSOFT ENVISION CENTER

Raymond, WA

Innovative Office Space

1555 sq ft

Firm Studio O+A

2016

<https://o-plus-a.com/project/microsoft-envisioning-center/>

<https://officesnapshots.com/2018/06/04/microsoft-envisioning-center-innovation-lab-redmond/>



Description

Microsoft's Envisioning Center is a lab, and like labs everywhere, it makes use of forms and structures unique to its purpose. The starting point here was the traditional office—workstations and meeting rooms—reimagined as technology-enabled super amenities. In the office of the future the workplace will work with you, anticipating and responding to your needs. If the brightness of this space and the playfulness inherent in some of its shapes suggest a school setting, that's not an accident. "Activity landscape," was the description adopted by both client and designer. O+A created an environment that encourages the unfettered thinking and passion for experimentation that animates a physics class or a team of project-oriented biologists. At Microsoft it is understood that the future will be an amalgamation of all the sciences and arts—and that it will be (or anyway should be) a bright and playful activity landscape.



Description

The Robert L. Preger Intelligent Workplace is a rooftop addition to Carnegie Mellon University's Margaret Morrison Carnegie Hall. The objectives of the project are to advance student and professional education in thermal, visual, acoustic, and spatial performance, air quality, and long-term building integrity. Thus, the Intelligent Workplace provides a living and lived-in laboratory for testing new, innovative products while demonstrating major changes in the advanced workplace. Its construction demonstrates innovative, high-performance assemblies in its enclosure, mechanical/electrical systems, and telecommunications systems, as well as in its interior finishes and furnishings.

The Intelligent Workplace houses faculty and graduate student offices, learning/resource laboratories and conference facilities. The learning laboratories provide hands-on learning experience to students and professionals in thermal performance, spatial performance, visual performance, and acoustic performance, as well as air quality and building integrity.

- Outdoor spaces for connection to environment
- Continuous monitoring of energy, thermal comfort and weather
- Desiccant dehumidification and heat recovery for 100% outside air
- Spatially flexible interior
- Individual temperature and air control
- Designed for dominant natural lighting

ROGER L. PREGER INTELLIGENT WORKPLACE

Carnegie Mellon University, 5000 Forbes Avenue Pittsburgh, PA 15213

Innovative Office Space

1997

Volker Hartkopf / 412.268.2351 / hartkopf@cmu.edu

<https://www.cmu.edu/homepage/innovation/2007/spring/intelligent-workplace.shtml>

<https://schooldesigns.com/Projects/carnegie-mellon-university-roger-l-preger-intelligent-workplace/>

<https://www.cmu.edu/environment/campus-green-design/green-buildings/intelligent-workplace.html>



SMART DUBAI OFFICE

Dubai, United Arab Emirates

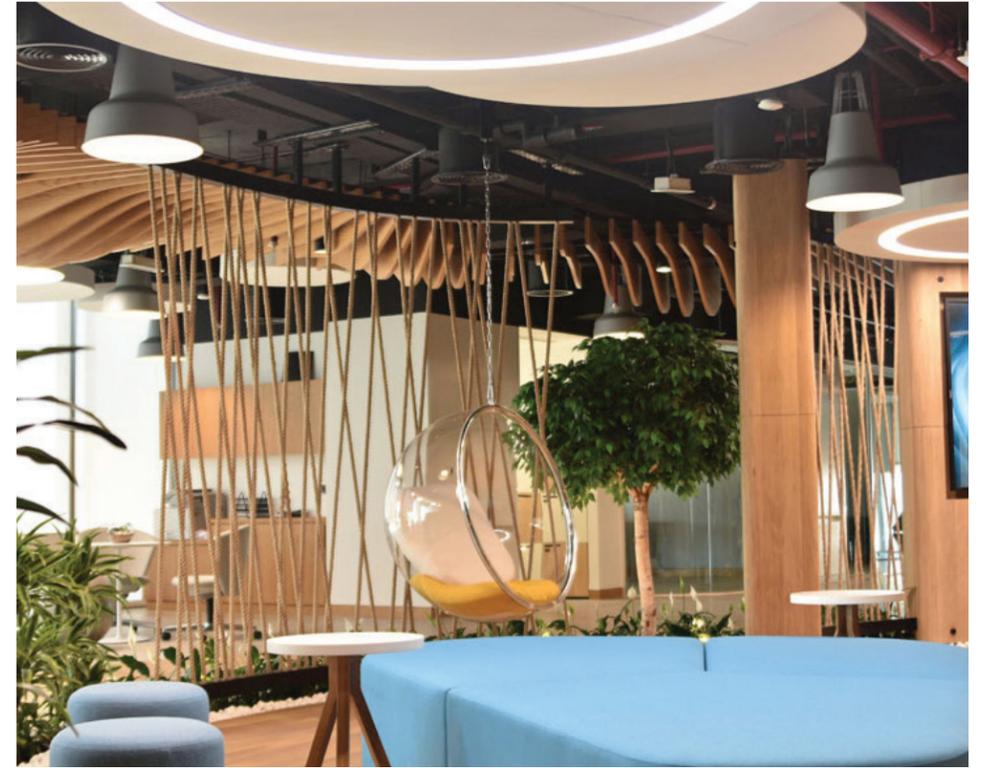
Innovative Office Space

Firm DWP

2017

[Contact](#)

<http://dwp.com/workplace-project/smart-dubai/>



Description

The 1,850m² office project, which was designed by Design World Partnership (dwp), is located in Dubai Design District (d3). The Smart Dubai Office is the technology arm of 'Smart Dubai', an initiative to transform the region into the world's smartest city by 2021.

DWP's design took inspiration from Dubai's shifting sand dunes and Creek to create organic structures while emphasising movement and fluidity throughout the office space. Summertown brought this design to life by installing curved wooden ceiling panels, wooden oak floors, landscaped gardens and roped partitions. All joinery items were custom-built by Summertown. To read full design case study [click here](#).

To deliver the sustainability-related ambitions of the client, Summertown adopted several key processes including green waste strategies to minimise the environmental impact during build. As a result, approximately 50% of waste was recycled and sold to scrap dealers.



BUTTERFLY HIGHWAY

North Carolina Wildlife Federation

Habitat Restoration Project

info@ncwf.org

704.332.5696

<https://ncwf.org/programs/garden-for-wildlife/butterfly-highway/>



Description

The Butterfly Highway is a statewide conservation restoration initiative that aims to restore native pollinator habitats to areas impacted by urbanization, land use change and agriculture across North Carolina. From backyard Pollinator Pitstops to large-scale roadside habitat restoration, the project is creating a network of native flowering plants to support butterflies, bees, birds and other pollen and nectar dependent wildlife.

The Butterfly Highway began with several communities in Charlotte, NC, that wanted to beautify their environment through planting gardens. Through the Butterfly Highway, these communities are transforming community gardens, backyard gardens, public spaces and park fragments into new pollinator and wildlife habitats. No garden is too small to make an impact and all together they are a part of the Butterfly Highway.



EAST CITY PARK

Curzon Street, Birmingham, England

Landscape Design with Biophilic Patterns

Since 2013

Architect : Patel Taylor

<https://www.archdaily.com/778893/eastside-city-park-patel-taylor>

<https://designingthelandscape.com/2015/03/12/biophilic-design-case-study-01-eastside-city-park-birmingham-city/>

<http://www.pateltaylor.co.uk/works/landscape/eastside-city-park>



Description

Eastside City Park was opened in 2012 and forms a key element of Birmingham City Council's Big City Plan, costing £11.75 million. The park has introduced 2.73 hectares of green space into the high density city centre and is vital for the ongoing regeneration of Millennium Point.

The space needed to contrast all the negatives associated with urban living found in Birmingham, ie high density, narrow, crowded streets. It also needed to address inequalities in access to health and green space, as noted in the Green Living Spaces Plan and the Marmot Review.

The solutions lied in creating a substantial green space with an open character that was easily accessible by various forms of transport and met the needs of the local and greater metropolitan general population. The project needed to provide a connection to nature that was noticeable absent from the city centre, through passive and active interaction.

The high number of refuge spaces, appeals to a wide range of users with differing landscape preferences. These refuge spaces vary in size, function and level of protection. Many of the refuge spaces are combined with prospective views towards the wildflower meadow and/or the water fountains. Both provide visual access to and ephemeral experiences of nature.



GREEN CLOUD

Gangxia Village, Shenzhen, China

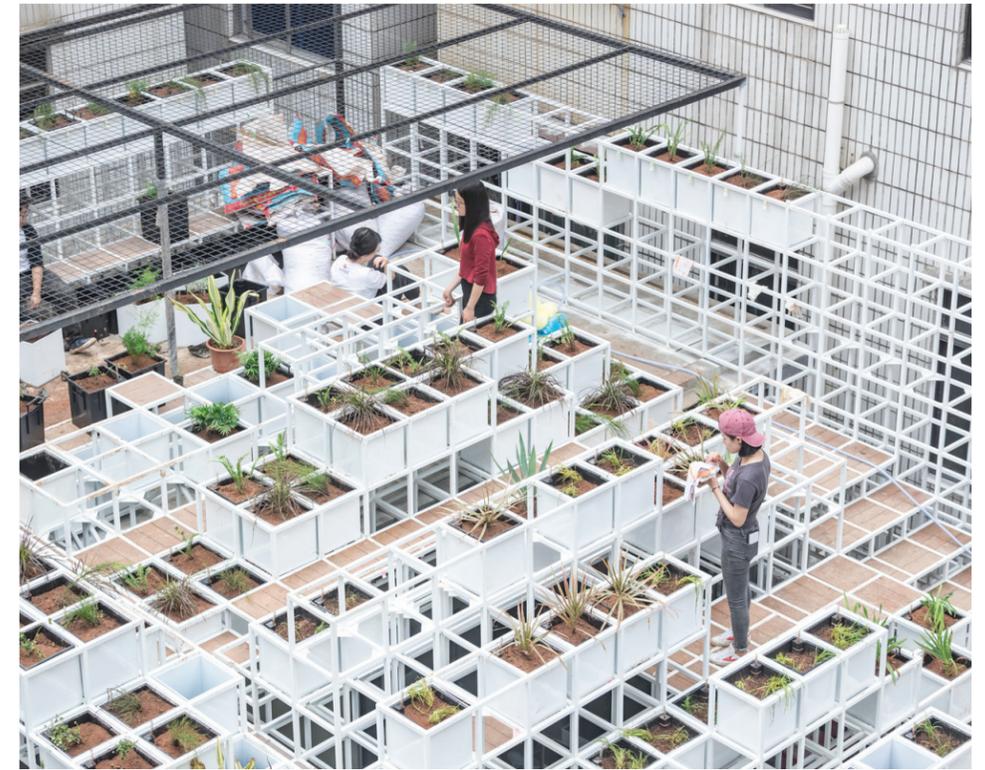
Landscape Design

Since 2017

Architect Zhubo Design

<https://www.archdaily.com/902375/green-cloud-zhubo-ao>

<http://www.zhubo.com/>



Description

Along with the expansion of modern city, original villages located in the edge of city have been turning into isolated islands in flourishing city. Urban village, resulting from population boom in modern China, exists in major cities as common case. However, there is no mountain or river in the so called urban 'village' as in imagination, but the concrete land which is hard and impermeable. Moreover, due to the poor condition of lighting and narrow space, The first impression of most people for urban village is messy and unsafe. Architects in AAO has made a practice seeking for a solution to problems in urban village.

Architects propose a tentative idea of Green Cloud, aiming to improve rainwater management ability as well as providing green and comfort common place for residents, from which the current living states of residents could be improved. 'Green Cloud' is a low-technique required renovation method which can be copied easily. To make use of large quantity of roofs in urban village, architects build Urban Mountain on the roof which have potential to be reconstructed. Architects set up Urban Mountain on dwelling roofs to make up for this kind of Green Cloud practice be as demonstration. They hope adjacent residents could be impacted to master the construction skill of Urban Mountain idiosyncratically and after that, copy them to their own roofs. As Urban Mountains being built in urban village one after another and connecting in the sky, a new landscape full of fun, joy and greening that they planned is coming out -- the Green Cloud.



ROOFTOP WHEAT PRAIRIE

Studio Gang Architects Chicago headquarters, Illinois

Landscape Design

Since 2016

Omni System sirwin@omni-ecosystems.com

<https://greenroofs.org/aoe/2017/rooftop-wheat-prairie>

<https://studiogang.com/now/wheat-from-studio-gangs-rooftop-prairie-harvested-in-chicago>

<https://www.omniecosystems.com/studioganghq>

Description

The Studio's living roof, a project with Omni Ecosystems, features a variety of native species including wildflowers, shrubs, grasses, and trees. Winter wheat was used as a cover crop to help the prairie propagate, and it flourished into a vast rooftop wheat field.

In collaboration with Omni and its sister entity the Roof Crop, along with Urban Habitat Chicago and Baker Miller, the wheat was harvested by hand, threshed, and milled into more than sixty pounds of high-grade pastry flour—demonstrating that green roofs can support more than just vegetables; they can sustain one of the most important staple foods in the world.



Description

This installation explores the relationship between the human desire to connect with nature (due to our evolutionary roots from nature), and the forces that cause us to simulate it (economic, environmental scarcity, urbanism, etc).

In the same way that biophilia creates a set of design guidelines for designers to tap into the innate needs of their visitors (ie by creating “non rhythmic sensory stimuli”) without necessarily incorporating the “real” stimuli- (ie, creating a wind simulating HVAC system rather than using an actual breeze, or putting plastic plants on the table rather than placing living plants) this project proposes to examine and incorporate a set of objects, experiences, and environmental conditions that capture both “real” nature (ie, the real smell of moss,) and “simulated nature” (ie artificial air freshener smell of moss).

If imitation is the most sincere form of flattery, this installation will look at our love affair with nature through the lens of emulation. Biophilic elements are presented in a gradient of the “real” and “simulated”, organized within a gridded superstructure that is orthogonal, organized, as a counterpart to the visual complexity of all the green elements. The “faked natural” elements included range from visual, audio, olfactory and haptic, (such as through breeze, water, and lighting elements.)

BIOPHILIC FANTASIES 2019

MOD UNISA, Morphett Street Bridge, Adelaide, Australia.

Biophilic Exhibition

Ani Liu affiliate of MIT Media Lab.

[Contact](#)

<https://ani-liu.com/biophilic-fantasies>



HEARING BIRDSONG PROJECT

Imperial College, London

Sound Experience Installation

0207 993 8205

hello@hearingbirdsong.com

<https://www.hearingbirdsong.com/>

<https://static1.squarespace.com/static/5c643c04809d8e0f3296b2f8/t/5cd3e23cb208fc7d3417a09/1557389893468/Hearing+Birdsong+Design+Document1A.pdf>



Description

The HearingBirdsong concept was co-designed by an interdisciplinary group of volunteers at a two-day sandpit innovation workshop hosted by Imperial College in January 2019. Practitioners, researchers, engineers, designers and people with hearing loss have all participated in its development to date.

Tom Woods, the project's lead, is the co-founder of Kennedy Woods, a design studio that creates positive social impact through user-centred design, architecture & storytelling.

Soundscape

Participants can choose to enter the free installation and experience the birdsong soundscape. For participants struggling to hear any of the bird calls, this can be an indicator that further investigation into their hearing is required.

The Experience

Their approach to testing hearing loss has remained unchanged for over 80 years. Whilst clinical tests provide highly accurate results, engagement with testing is poor. They believe the familiar and reassuring sounds of nature could offer an alternative to the mechanical clicks and beeps of a traditional hearing test.

The System

Up to six speakers can be interconnected to form the audioscape installation. Each Birdbox speaker functions independently, with its own battery power supply, loudspeaker and digital receiver.



LIVING GARDEN INSTALLATION

Beijing Olympic Park

Biophilic Net Positive Installation

Firm MAD Architects

2018

<https://inhabitat.com/mad-unveils-biophilic-home-of-the-future-that-produces-all-its-own-energy-in-china/>

<http://www.i-mad.com/post-art/living-garden/>



Description

Beijing-based MAD Architects recently completed its “home of the future” prototype, a net-zero energy pavilion that aims to blur the lines between indoor and outdoor living. Created in collaboration with Chinese renewable energy company Hanergy, the “Living Garden” features a curvaceous, latticed roof topped with Hanergy solar panels that are angled for optimal solar conditions and generate enough electricity to satisfy the daily needs of a household of three. The futuristic structure was installed as part of the 2018 China House Vision Exhibition located next to the Bird’s Nest Stadium inside Beijing’s Olympic Park.

Conceived as an experimental model, “Living Garden” does not have much in common with a traditional house. Rather, the structure was built like an airy pavilion filled with lush green space and seating. The nature-inspired structure consists of three main parts: a series of angled solar panels, a latticed timber roof structure and columns and various living spaces and gardens on the ground level. The grid-like roof is inset with translucent, waterproof glass to provide shelter from the rain. Hard angles were eschewed in favor of organic curves, while the addition of feathery grasses and trees help soften the overall look.

GLOSSARY

	Name	Location	Type	Email	Phone	Link
1	07Beach + Studio	Ho Chi Minh, Vietnam	Innovative Office Space			https://www.archdaily.com/889042/office-design-in-ho-chi-minh-city-07beach-plus-studio-happ
2	Beard Center for Innovation	Fort Washington, PA	Innovation lab, Maker space			http://www.1100architect.com/portfolio-items/germantown-academy/?portfolioCats=31%2C29
3	Biofilia Office	Itaim Bibi, Brazil	Biophilic Office			https://itsinformov.com.br/projetos/sede-its-informov-6oandar-biofilico/
4	Biophilic Fantasies 2019	MOD UNISA, Morphett Street Bridge, Adelaide, Australia.	Biophilic Exhibition			https://ani-liu.com/biophilic-fantasies
5	Butterfly Highway	North Carolina Wildlife Federation	Habitat Restoration Project	info@ncwf.org	704-332-5696	https://ncwf.org/programs/garden-for-wildlife/butterfly-highway/
6	Capital One Lab	San Francisco, California	Innovative Office Space			https://o-plus-a.com/project/capital-one-labs/
7	CCA Material Lab	Oakland (5212 Broadway) San Francisco (1111 8th St)	Material Lab	matlib@cca.edu	510-594-3658	https://libraries.cca.edu/collections/special-collections/materials-library/
8	Center for science & ecology	86 34th St. Suite D601, Brooklyn, NY	Research Design Lab		518-276-6466	https://www.case.rpi.edu/index.php
9	Citris Invention Lab	University of California, Berkeley, CA	Design Lab / Maker Space	inventionlab@citris-uc.org	510-664-4448	https://invent.citris-uc.org/
10	Conservatorium Hotel, Amsterdam	Paulus Potterstraat 50, 1071 DB Amsterdam, Netherlands	Innovative Open Space			https://www.lissoniassociati.com/en/architecture/hotel-resorts/conservatorium-hotel-amsterdam/36
11	Desert Routes Office	Boulevard Plaza, Dubai, United Arab Emirates	Biophilic Office Space			https://officesnapshots.com/2016/11/18/desert-routes-offices-dubai/
12	East City Park	Curzon Street, Birmingham, England	Landscape Design			https://www.archdaily.com/778893/eastside-city-park-patel-taylor
13	Ecological Design Lab	Ryerson University, Toronto, Ontario	Ecological Lab	nm.lister@ryerson.ca	416-979-5000, ext. 6769	https://ecologicaldesignlab.ca/
14	Frame Lab : The Next Space 2018	Klönneplein 1, 1014 DD Amsterdam, Netherlands	Biophilic Exhibition	studio@oliverheathdesign.com	44 (0) 1273 326031	https://www.frameweb.com/news/nature-knows-best-oliver-heath-on-biophilic-design
15	Google Office Dublin	Zurich, Switzerland	Innovative Office Space			https://www.architonic.com/en/project/evolution-design-google-campus-dublin/5104124
16	Green Cloud	Gangxia Village, Shenzhen, China	Landscape Design			https://www.archdaily.com/902375/green-cloud-zhubo-ao
17	Hanoi Creative City	Trưng, Hà Nội, Hanoi, Vietnam	Co working Space			https://www.facebook.com/pg/hncreativecity/about/?ref=page_internal
18	Hearing Birdsong Project	Imperial College, London	Sound Experience Installation	hello@hearingbirdsong.com	0207-993-8205	https://www.hearingbirdsong.com/
19	IED Innovation Lab	Barcelona + Madrid	Digital Lab	info@iedinnovationlab.com	34 93 238 58 89	https://iedinnovationlab.com/
20	Living Garden Installation	Beijing Olympic Park	Biophilic Net Positive Installation			http://www.i-mad.com/post-art/living-garden/
21	Material District	Naarden, Netherlands	Material Lab	info@materialdistrict.com	31 (0)20 713-0613	www.materialdistrict.com

	Name	Location	Type	Email	Phone	Link
22	Material Driven	London, UK Dallas, TX	Material Lab	purvac@materialdriven.com		https://www.materialdriven.com/?fbclid=IwAR1BTPWneFO6uygatWXz-kHWR5ueF0DxdQISfhgCVu9WrQwcdBCXxMvXIMUI
23	Material Experience Lab	Milan, Italy & Delft, Netherlands	Material Lab	Karana@tudelft.nl	31 (0)15 27-85726	http://materialsexperiencelab.com/
24	Materio	8 rue Chapel. Paris, France	Material Lab	hello@materio.com	33 1 40 82 98 48	www.materio.com
25	Microsoft Envision Center	Raymond, WA	Innovative Office Space			https://o-plus-a.com/project/microsoft-envisioning-center/
26	MIT Media Lab	77 Mass. Ave., E14/E15, Cambridge, MA 02139	Design Lab	formatted @media.mit.edu	312-281-6900	http://web.mit.edu/SustainableDesignLab/index.html
27	MIT Sustainable Design Lab	77 Massachusetts Avenue - Cambridge, MA 02139	Design Lab	tito@mit.edu	617-253-7714	http://web.mit.edu/SustainableDesignLab/index.html
28	MxD (Manufacturing X Digital)	1415 N Cherry Ave, Chicago, IL 60642	Digital Manufacturing Lab	info@mxdusa.org	312-281-6900	https://mxdusa.org/
29	Nature Lab	RISD's Waterman Building, 13 Waterman Street, Providence, Rhode Island, 02903	Biophilic Lab	nature@risd.edu	401-454-6451	https://naturelab.risd.edu/
30	Olin labs	Philadelphia, Los Angeles	Design Lab		215-440-0030	https://olinlabs.com/
31	Pacific Northwest National Laboratory	Puget Sound 1501 E Madison St, Suite 200 Seattle, WA 98122	Design Lab	suresh.baskaran@pnnl.gov	509-375-6483	https://www.pnnl.gov/
32	Piet Hein eek laboratory & workshop	Halvemaanstraat 30, Eindhoven	Furniture Lab, maker space	info@pietheineek.nl	31 (0) 40-2051100	https://pietheineek.nl/en
33	Roger L Preger Intelligent Workplace	Carnegie Mellon University, 5000 Forbes Avenue Pittsburgh, PA 15213	Innovative Office Space	hartkopf@cmu.edu	412-268-2351	https://www.cmu.edu/environment/campus-green-design/green-buildings/intelligent-workplace.html
34	Rooftop Wheat Prairie	Studio Gang Architects Chicago headquarters, Illinois	Landscape Design			https://studiogang.com/now/wheat-from-studio-gangs-rooftop-prairie-harvested-in-chicago
35	Smart Dubai Office	Dubai, United Arab Emirates	Innovative Office Space			http://dwp.com/workplace-project/smart-dubai/
36	Space 10	1711 Copenhagen, Denmark	Design Lab	discover@space10.com	979-845-6545	https://space10.com/
37	Texas A&M University Daylighting Lab	College of Architecture, Texas A&M University, College Station, TX	Design Lab			https://research.arch.tamu.edu/daylight/
38	The Carnegie Center for Global Ecology	260 Panama St. Stanford, CA 94305	Ecological Lab	dge-info@carnegiescience.edu	650-319-8904	https://www-legacy.dge.carnegiescience.edu/
39	The Integrated Design Lab	Puget Sound 1501 E Madison St, Suite 200 Seattle, WA 98122	Design Lab	cmeek@u.washington.edu	206-616-6566	http://www.idlseattle.com/
40	The Shard Living Lab	32 London Bridge St, London SE1 9SG, United Kingdom	Biophilic lab	info@daewhakang.com	44 7540-643-663	https://www.daewhakang.com/project/the-shard-living-lab/
41	UMass Amherst	210 John W. Olver Design Building, Amherst, MA 01003-2901	Design Lab	bweil@eco.umass.edu	413-545-1820	https://bct.eco.umass.edu/research/facilities/
42	XR Lab Berkley	Wurster Hall, Berkeley, CA 94720	VR lab	lcaldas@berkeley.edu	510-289-7792	https://xrlab.berkeley.edu/