



THIS EDITION FEATURES:

A. ABOUT MEDAD

B MEDAD NEWS

C. MEDAD PROJECTS

A display of Medad's projects that has been completed in the past three monthes.

D. INTERNATIONAL PROJECTS

A quick peek on international projects around the globe and Medad critical eye on them.

E. ARTISTIC EYE

Art is one of the main focal points in architecture. Thus, as part of Medad's vision we discuss unique contemporary artistical works featuring their artists and the minds behind it

F. NEW TECH IN ARCHITECTURE 30

Medad keeps up with new technologies related to the architectural feild, therefore we are sharing some of the new exciting ennovation as part of Medad's ambition and aspiration to inrich the practice.

G. SUSTAINABLE SOLUTIONS

As part of Medad's environmental commitment, we share few smart sustainable ideas and technologies related to the feild of architecture.

To remind ourselves with the obligation we carry for the future generations.

H. BRANCHES

3/

02



() سنـوات

10 أعوام مضت على نشر أول أعداد مجلة مداد مهندسون استشاريون؛ سعت فيهم مداد إلى إثراء الثقافة المعمارية وتوطيد العلاقة بين الفكرة والإنسان.

10 أعوام مضت على مشاركتكم الشفف والعمل.

ABOUT MEDAD:

Medad is a creative design office providing architectural, urban and interior design along with project management and furniture procurement services for clients across the globe.

We design innovative retail, residential, hospitality, office and integrated mixed-use developments, with a focus on the people who use them. Our office is committed to creating unique and memorable destinations — projects and places that enhance their surroundings and improve the lives of those who populate and move through them daily.

Medad thinks globally but acts locally. We believe design should be timeless and inspiring yet practical for both their owners and occupants. We imagine things from both the outside to the inside and the inside to the outside. Our special expertise is the interlocking of the architecture to the interior design. With creativity and modern thinking we realize projects which stand out and the result is perfectly tailored to the user.

Medad has been part os the arcitecture community and engineering consulting for 34 years with a rich history of collaborations and ever enriched artistical, technical, and professional capabilities.

Medad also established several entities and sister companies (Egyptian Company for Building Industry "Madina", Arabian Wood industries Co. "Araek", "Madar" Project Management, United Group of Wood Industry "khashab Khan", TORATH for construction and urban development, FNON for the wood industry and finally AlMayan for handmade products).

with a continued creative activities and products with a high degree of excellence.

Medad's brances extend to several countries including Saudi Arabia (Riyadh, Jeddah), Qatar (Doha), UAE (Ras Al Khaimah), Libya (Tripli), and finally Kenya (Nairobi).

Medad senior staff's accumulated experinces are being passed on through an educational process, whether lecturing or arbitration projects in various Egyptian universities such as Cairo University, American University in Cairo, Arab Academy for Science, Technology & Maritime Transport, and Modern Sciences and Art University (MSA).



MEDAD NEWS

ANCHOR Developments Launches Its first Project In The New Administrative Capital "RUE DE RIVOLI"











Signing Ceremony Between ANCHOR Developments And MEDAD Consultant Engineers, The SAUDI EGYPTIAN Developers, And "MRB" for Project Management







TAQA New Terminal Building in Alexandria

تم الانتهاء من تنفيذ مبنى محطة طاقة الجديدة بالإسكندرية، والذي أسند إلى مداد مهندسون استشاريون تصميمه والإشراف على تنفيذه لتلبية احتياجات المحطة من خزانات وقود ومبنى إدارى ومناطق تحميل ومظلات.

ويتكون المشروع من ثلاثة مبان على النحو التالى:

1. مبنی إداری بمساحة إجمالية 1000 م2 مقسمة علی دورین بمساحة 500م2 لکل دور.

2. مبنى مرافق بمساحة إجمالية 450 م2.

3. مكتب أمن بمساحة إجمالية 16 م2. (الطول 4 م - العرض 4 م - الارتفاع 4 م).

وقامت مداد بإعداد التصاميم المعمارية والإنشائية والكهروميكانيكية للمشروع بما يضمن الاستجابة المثلى لمتطلبات وظيفته واحتياجاته.









"إن التعاون مع شركة ANCHOR Developments يضيف الكثير لسابقة أعمال شركة مداد، ويحقق التكامل في الخبرات معها."

هكذا قال المهندس حسين أسعد، رئيس مجلس إدارة شركة مداد مهندسون استشاريون وأشار إلى أن شركة مداد ستقوم بتنفيذ التصميم المعماري والإنشائي للمشروع، بالإضافة إلى الإشراف على أعمال البناء، حيث سيتم التعاون مع كافة الأطراف العاملة بالمشروع لوضع تصميم استثنائي يراعي معايير الاستدامة وتوفير الطاقة، كما يراعى عناصر التشغيل الآمن والسليم للمشروع.

> https://fb.watch/i7JqUuwW9m/ لمشاهدة الكلمة كاملة:

ووقع التعاقد كل من المهندس عمرو على، رئيس مجلس إدارة شركة Anchor Developments، والمهندس محمد عبدالحافظ، رئيس القطاع التجارى بالشركة السعودية المصرية للتعمير، والمهندس حسين أسعد، رئيس مجلس إدارة شركة مداد مهندسون استشاريون، والمهندس محمد راشد، رئيس مجلس إدارة شركة MRB لإدارة المشروعات.





Global Membership Council Wenbinar





Global Membership Council Webinar: Global Case Studies of Innovative Architecture in Compliance with Local Codes & Standards











شاركت مداد مهندسون استشاريون في ندوة أقامها ICC Global Membership Council بعنوان: Global case studies of innovative architecture in compliance with local codes and standards

وقامت مداد يتقديم مشروعها "أكاديمية حياة الدولية" أنموذجا لكفاءة التصميم وتطبيق الأكواد والمعايير.





Sawary Compound Villas, New Alex, Egypt







تطور المراحل الإنشائية في مشروع صواري الواقع في مدخل مدينة الإسكندرية على الطريق الصحراوي الممتد من كارفور الإسكندرية إلى كارفور برج العرب على بعد 6 كيلومترات من بحيرة مريوط وقريب من مستشفى الشرطة والذى شاركت مداد مهندسون استشاريون في تصميمه.

Asten College To Open first International School In Taj City



أسند إلى مداد مهندسون استشاريون الإشراف على تنفيذ أول فرع من مدارس أستن كولدج الدولية بمشروع تاج سيتى. وهي إحدى مشروعات شركة التعليم المتوازن (BalancED) التي تتبع نظام التعليم البريطاني (IGCSE) ومن أول المدارس التي تطبق فكرة التحول الرقمي في التعليم من خلال الشراكة مع مايكروسوفت مصر.

المشروع عبارة عن مبنيين؛

٦. مبنی إداری (أرضی + دورین) بمساحة حوالي 315 متر مربع لكل

2. مبنى المدرسة (أرضى + 3 أدوار) بمساحة حوالي 3500 متر مربع لكل طابق.







The Rue De Rivoli mall project is one of three mall projects being developed for the Bleuvert residential compound. The project is being developed by Medad Consultant Engineers in Collaboration with Anchor Developments. The 10816 m2 land plot is located along the southern edge of the compound overlooking the highway. This, along with the fact that the land plot is long and narrow, allowed for utilisation of the front facade to ensure that all the economic venues were overlooking the street. This provided maximum exposure for all the tenants, while preserving the privacy of the compound's residents since the mall is facing the highway.

The facade treatment is sleek, modern, and demands your attention. A mixture of open terraces and varying heights creates an exciting and welcoming experience. Since the project is facing south, the facades had to be treated to minimize the use of curtain walls, while still maintaining the aesthetic. For further environmental treatment, the floating rooftops along the southern face act as wind catchers that ensure the area is naturally cool.







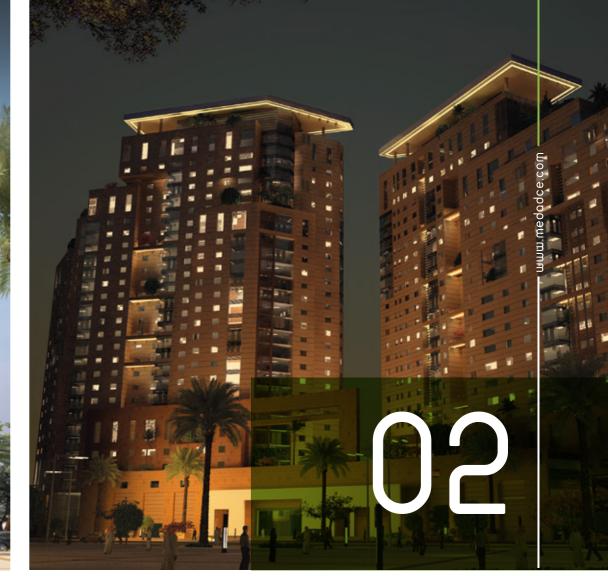
مركز رو دي ريفولي التجاري هو واحد من ثلاثة مشاريع مراكز تجارية تصممها شركة مداد مهندسون استشاريون في مجمع بلوفير السكني، بالتعاون مع شركة أنكور للتطوير العقاري.

مساحة أرض المشروع تصل إلى 10816 م2 و تقع الأرض على الحدود الجنوبية للمجمع المطلة على الطريق السريع الخارجي. تم استغلال هذا الموقع الاستراتيجي، و شكل الأرض المستطيل ذا الطول الممتد، لتصميم واجهة أمامية عريضة، تشمل كل وحدات المحلات، فتعطي كل الوحدات منظورا متساويا على الشارع الرئيسي، و في نفس الوقت يؤكد خصوصية سكان المجمع بتقليل الفتحات في الواجهة الخلفية.

عالجت مداد الواجهة الأمامية بطريقة معاصرة و جاذبة للانتباه، باستخدام أفنية و شرفات، و تنوع الارتفاعات في الكتل، لكي تخلق جوًّا مرحبا و مثيرا.

من ضمن المعالجات البيئية، تم تقليل كمية الحوائط الزجاجية في الواجهة، و صممت الأسطح المعلقة فوق المبنى لتكون نوعا من ملاقف الهواء التي تخلق تيارا مرطبا في الواجهة الجنوبية.



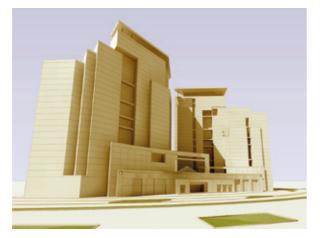


Medad Consultant Engineers participated with this design, and won, in the Bakkah Residential Tower Competition in 2014, which was held by the Mawten Real Estate Company.

The project is set in a 6580 m2 land plot, alongside the Mecca-Jedda highway, which gives it an advantage for easy access. Following building regulations in the area, Medad chose the setbacks that reduced the building footprint to 4026 m2 for the ground floor - about 60 percent of the total land area - and 4277 m2 for the typcal floors above. The tower was proposed to be 24 stories tall, with a ground floor, mezzanine floor, and a three-level basement for parking. This would make the total built up area around 80502 m2

The design concept was to create two separate towers connected by a podium around the bottom. The towers were angled in such a way that they appear as open doors, welcoming the user inside. This was further emphasized by designing a welcome plaza in front of the entrance.







فاز التصميم المعماري الذي طورته مداد مهندسون استشاريون بمسابقة برج بكة السكني، التي أقامته شركة الموطن للتطوير العقاري سنة 2014 م.

تقع أرض المشروع على الطريق السريع الرابط بين مكة و جدة، مما يسمح بسهولة الدخول و الخروج. مساحة الأرض الكلية تصل إلى 6580 م2، بمساحة بناء تبلغ 4026 م2 للحور الأرضى، و 4277 م2 لباقي الأدوار مما يجعل نسبة البناء 60 بالمائة .من مساحة الأرض

التصميم المقترح مصمم من دور أرضي وميزانين و 24 طابق و3 أدوار بدروم تستخدم مواقفًا للسيارات، فتصل مساحة البناء الكلية إلى 80502 م2.

تتركز الفكرة التصميمية التي اعتمدت عليها شركة مداد على تقسيم المشروع إلى برجين متشابهين و منفصلين، يربط بينهما قاعدة كبيرة في الأدوار السفلية. فصل الأبراج يسمح بمرور الرياح بينهما، كما صمما أيضا ليكونا على زاوية تجعلهم كأنهما أبواب مفتوحة ترحب بالمستخدم، و يؤكد هذا المبدأ عن طريق البلازا الاستقبالية أمام المحضل الرئيسي.





The mosque is located within New Cairo, on a land plot of 13,000 m2. The built up ratio is roughly 30 percent, equating to about 4000 m2. In addition to having prayer halls for both men and women, there is a multi-purpose hall in the design, overlooking the outer courtyard. There is also a library built within the courtyard by the main entrance, as well as a set of clinics and a children's playground.

The mosque features a contemporary design that uses natual, local materials. This includes the paint, masonry, and marble.







يقع المسجد وسط أحياء القاهرة الجديدة وعلى مساحة أرض حوالى 13,000 متر 2 و تبلغ نسبة المبانى حوالى 300 م عادل حوالى 4000 م 2. بالإضافة إلى مصلى الرجال و النساء تم وضع قاعة متعددة الأغراض بملحقاتها و تطل على صحن المسجد الخارجى.

كما تم وضع المكتبة أيضا على الصحن و بجوار المدخل الرئيسى, كذلك تم عمل مجمع عيادات لتخدم سكان المنطقة بالإضافة إلى حديقة صغيرة للأطفال.

تصميم المسجد جاء بالطابع المعاصر, و تم استخدام الخامات الطبيعية فيه من دهان و أحجار و رخام محلى و ألوان طبيعية.







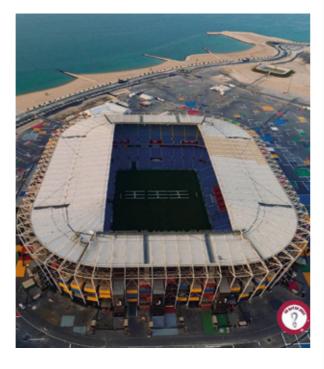
Stadium 974

"A stadium built to disappear."

The stadium was built on a rectangular plan with clearly rounded edges constructed on a 450,000 m2 waterfront sit. It requires two different modular design systems. The first was to establish a grid column-and-beam structure (Meccano concept) and the second was to have modular volumes for the stadium's different uses (Lego concept)." Embracing the trend of shipping container architecture, on a scale that has scarcely been seen before.







The 44,089 seat auditorium is divided into two levels separated by a strip of boxes. It is the only stadium built for the World Cup without air conditioning, so it only hosted evening matches. Also, thanks to the stadium's location by the bay, it's provided with a refreshing breeze.

It was designed by fenwick Iribarren Architects. The name of the venue, 974, refers to both the number of shipping containers used in the structure and the international dialing code of Qatar. It was originally expected that the reassembled stadium would go to somewhere in Africa, but there are suggestions it may go to Uruguay, where it may be used for the 2030 FIFA World Cup if the Uruguay Argentina Chile Paraguay bid succeeds.



Individual containers were joined together to create larger prefab design modules. They can then be directly 'plugged' into place as per functional requirements, and painted to complete the varicolored exterior scheme. The Architects designed a number of such modules to function as toilets, audience seating, concession units, office units, and skyboxes. Even the provision of building services adheres to a modular configuration, where piping, ducting, and cables are left open for testing and verification for maximum flexibility and minimum installation time.



إستاد 974 أو كما كان يعرف سابقاً إستاد رأس أبو عبود وهو ملعب كرة قدم في مدينة الدوحة في دولة قطر، يتسع لـ40,000 متفرج، افتتح في 30 نوفمبر 2021. أنشئ لاستضافة مباريات نهائيات مونديال 2022. أنشئ وعلى غرار الملاعب الأخرى المخططة لنهائيات كأس العالم 2022, ستعمم تقنية حديثة لتبريد إستاد 974 باستخدام الطاقة الشمسية ولها بصمة صفر الكربون وذلك من الستائر الموجودة فوق الملعب، ويمكن الستائر الموجودة فوق الملعب، ويمكن تفكيك الإستاد بالكامل واستخدامه في مشاريع أخرى مرتبطة بالرياضة وأخرى غير مرتبطة بالرياضة وأخرى غير مرتبطة بالرياضة وأخرى أمكن مكانه مشروع على الشاطئ المائى.

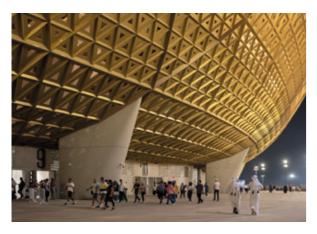
استخدم في بنائه حاويات السفن ومقاعد قابلة للتفكيك، يعتبر الإستاد قليل الكلفة ومن الممكن استخدام مكوناته في أعمال أخرى وهو نموذج جديد لإنشاء الإستادات. وقد سمي الملعب باسم 974 لسببين:

1. استخدم في بنائه 974 حاوية.



Lusail Stadium

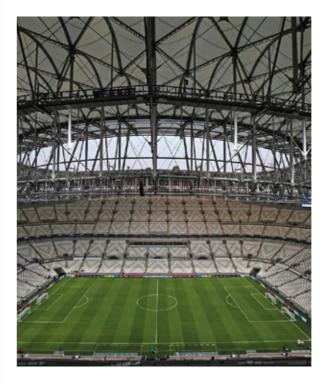




Resembling a 'burnished golden vessel', the Lusail has been described as the "centerpiece" of all the venues developed for the 2022 World Cup in Qatar. As the stage for the 2022 FIFA World Cup final, the structure boasts a capacity of 80,000.

The stadium's design molded by aesthetic geometric motifs in anodized metal taken from Qatar's traditional architecture, evokes a glimmering golden ornament. Lusail Stadium's simple yet expressive curved form rests on V-shaped perimeter supports that frame entrance and exit gates, along the surrounding public concourse.

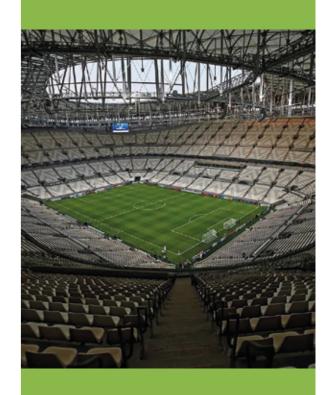




The venue's bowl makes use of a diagrid structure to support the roof and seating areas, which is expressed along the surface of its envelope. Triangular motifs and intersecting angular ridges on the lustrous metal exterior add rhythm and a geometric design slant to the stadium's visual identity, with horizontal striations imparting a sense of scale to the latticed facade. Openings between the units of the diagrid allow light to infiltrate the bowl as well as allow for supplementary spaces allocated as part of the area program. These perforations, which are also triangular in shape, serve to underpin the visual qualities of the structural design, almost exhibiting fractal-esque configurations.

استاد لوسيل كأس العالم ، هو ملعب كرة قدم، أُنشئ عام 2021 في لوسيل في دولة قطر، وهو أكبر الملاعب في دولة قطر حيث يتسع لثمانين ألف متفرج، وأُنشئ لاستضافة مباريات كأس العالم 2022 والمباراة النهائية.

صمم الإستاد بزخارف هندسية جمالية من المعدن المؤكسد مأخوذ من العمارة التقليدية في قطر. تضيف الزخارف المثلثية والحواف المتقاطعة على السطح الخارجي المعدني اللامع إيقاعًا وتصميمًا هندسيًا يميل إلى الهوية المرئية للملعب ، مع خطوط أفقية تضفي إحساسًا بالحجم على الواجهة الشبكية. تسمح الفتحات الموجودة بين وحدات المخطط للضوء بالتسلل إلى وعاء الاستاد.







from its inspirational roots in 1920 to now, minimalism has served as a respite from an often busy, cluttered world—frequently expressed through architecture, art, or even as a school of thought. clutter-free, calming space. The term was coined by philosopher Richard Wollheim and influential figures throughout minimalism's development include artists such as Carl Andre, Sol LeWitt, Robert Morris and Agnes Martin. Sometimes referred to as Minimal Art, ABC Art, Cool Art, Literalist Art, Object Art, and primary structure art. because it strives to keep things clean, simple, and stripped down to only the essentials With minimalism, no attempt is made to represent an outside reality.









The Main Characteristics of Minimalism: Geometric forms, Precise and hard-edged, Expressionless Colors, Truth in Art (because it does not pretend to be anything other than what it is), Order, Simplicity, and Harmony. Some elements of Minimalism art factory manufactured materials. — Some of the minimalist artists, particularly those dealing with sculptures, may use everyday material such as brick tiles and light bulbs for their sculpture.





Born in 1928, Donald Judd the minimalist master - who remained deeply skeptical of the term "Minimal Art" - was an American artist, whose rejection of both traditional painting and sculpture led him to a conception of art built upon the idea of the object as it exists in the environment. Judd studied philosophy and art history at Columbia Uni¬versity and painting at the Art Students League.

He was first publicly recognized as an art critic, writing reviews for Arts magazine. He developed from an abstract painter into the producer of the hollow, rectilinear volumes for which he became well known. Key to this transformation was his essay "Specific Objects," the first serious attempt to frame the new movement - Minimalism - theoretically. The text celebrated a new kind of artwork untethered from the traditional frameworks of painting and sculpture, focusing instead on an investigation of "real space".



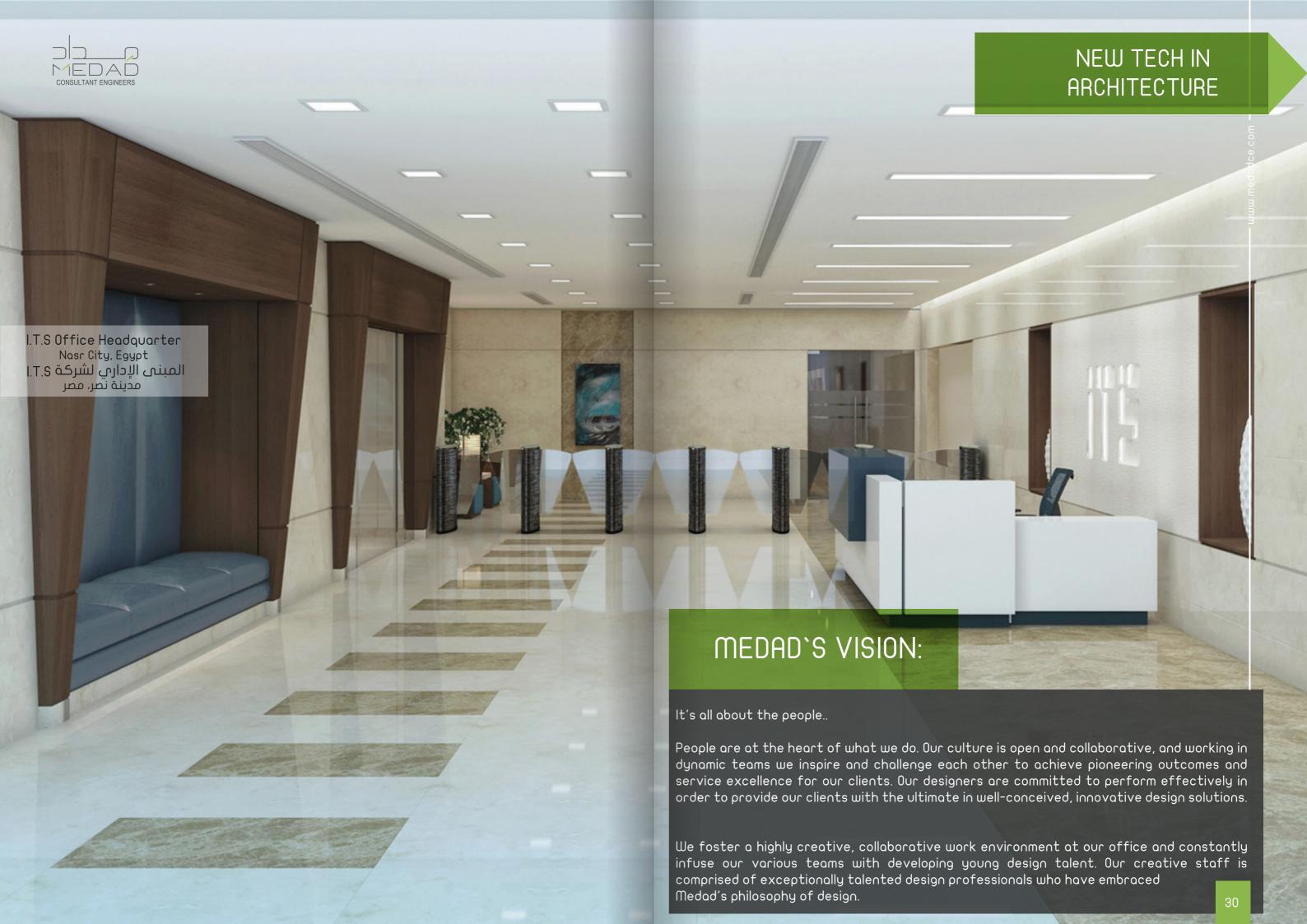




"Three dimensions are real space and actual space is intrinsically more powerful and specific than paint on a flat surface."

Minimalist elusiveness is always more complicated than it appears. In 1964 Judd turned to professional sheet-metal fabricators to make his work out of galvanized iron, aluminum, stainless steel, brass, and copper.







Architects are not sure what to think about artificial intelligence. You are probably very familiar with how Al will change industries, like cybersecurity, medicine, and manufacturing. Well, how about architecture?

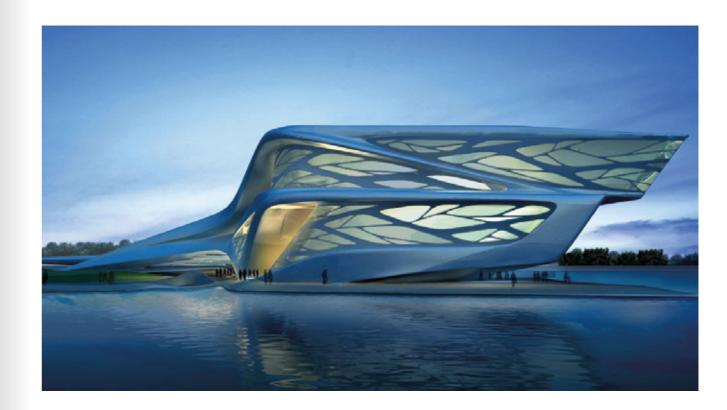
The core issue centers around the idea that creatives will be replaced by super-intelligent robots to design buildings, create art, or design vehicles.

"Computers are not good at open-ended creative solutions; that's still reserved for humans. But through automation, we're able to save time doing repetitive tasks, and we can reinvest that time in design," says Mike Mendelson instructor and curriculum designer at the Nvidia Deep Learning Institute.



As a refresher, artificial intelligence is a computer system that is able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.

Al comes to these decisions by utilizing tons of data, and this is where Al can shine in architecture.



The ability to utilize tons of previous data in a millisecond to enhance the architecture design process could work wonders.

for an architect, starting off a project requires countless hours of research, both of understanding the design intent of the project and of projects in the past. This is where Al steps in.

With Al's ability to take limitless amounts of data, an architect could very easily go about researching and testing several ideas at the same time with ease; conceptual design with little to no use of the pen and the paper.

Imagine you need to design a family home. A task that is no easy feat, you need to think about the client's needs, expectations, and the design language. Not to mention you have to understand the laws that govern how you can construct the home.

The human cannot be separated from architecture and designs. No doubt, artificial intelligence made things easier for constructions and designs but it cannot analyze all the live factors or sudden changes immediately. so a perfect construction needs proper synchronization between the artificial intelligence and efficient architects.





SUSTAINABLE SOLUTIONS

Sana Alebdaa` School Mecca, Saudi Arabia مدارس سنا الإبداع مكة المكرمة، السعودية

111

OUR SEVICES:

TI

111

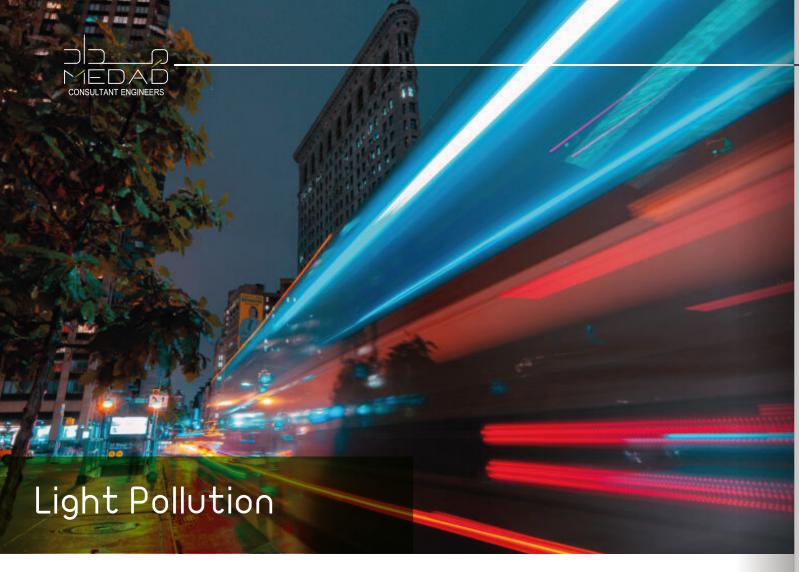
Medad is a full-service interior design firm known for its luxury, sophistication, and comfort in the world of architecture and interior design. Our skilled design team specializes in creating unique spaces. We do not have a predetermined style. Our goal is to create beautiful custom design that fulfils our client's needs and reflect their unique personality.

Services:

-Architecture -Urban Design -Interior Design

-Project Supervision

-ff&E Procurement



People all over the world are living under the nighttime glow of artificial light, and it is causing big problems for humans, wildlife, and the environment.

An increased amount of light at night lowers melatonin production, which results in sleep deprivation, fatigue, headaches, stress, anxiety, and other health problems. Recent studies also show a connection between reduced melatonin levels and cancer.





Light pollution is defined as the excessive and inappropriate artificial light. It includes four components often combined and sometimes overlap.

Glare

A proportion of street light and security lights glare from unshielded lighting is considered a public health hazard especially to the old. Glare light scattering in the eye causes loss of contrast; it sometimes blinds you temporarily leading to unsafe driving conditions, for instance.

Light trespass

When unwanted light enters one's property; for example, by turning on the lights in a bedroom of a person trying to sleep. This often creates a nuisance, detracts from amenity, and wastes energy and money.

Sky glow

Sky glow is all the reflected light and upward-directed unshielded light combined together and escaping up into the sky. This light is completely wasted, scattering in the atmosphere and detracts from the beauty of the starry sky at night.

Clutter

It refers to the bright, confusing, and excessive groupings of light sources, commonly found in over-lit urban areas. The proliferation of clutter contributes to urban sky glow, trespass, and glare.



The effects of lighting

lighting design can have either positive or negative effects on people, especially in the spaces where many people spend a lot of time, like schools and offices. Research has shown positive correlations between quality lighting conditions and improved productivity as well as higher student test scores. Studies also suggest that quality lighting has positive impacts in healthcare settings, for example by improving the mood and perception of both staff and patients. Conversely, poor lighting conditions can hinder the way people work, learn, and heal by causing distraction, discomfort, and fatigue.





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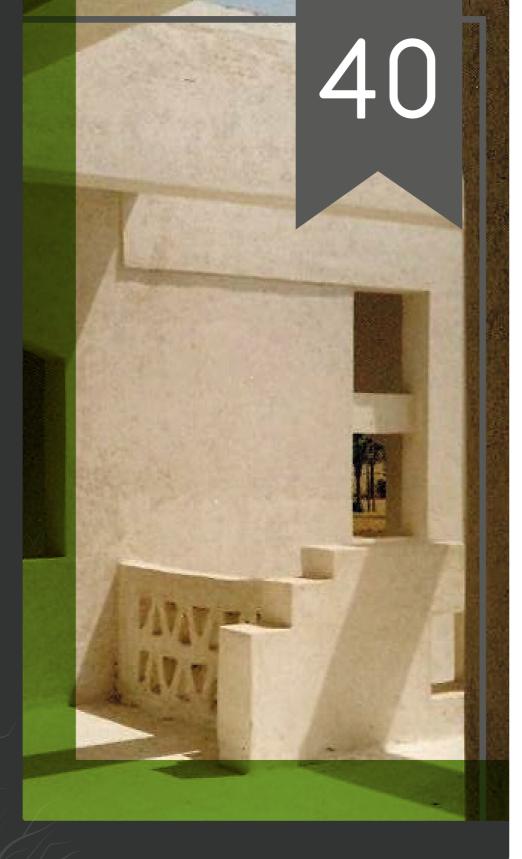
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