ARCHITECTURAL PORTFOLIO



SMAIL FAZAL



ARCHITECT & INTERIOR DESIGNER

www.ismailfazal.com

ISMAIL FAZAL

ARCHITECT & INTERIOR DESIGNER

Sharjah, U.A.E. ismail@ismailfazal.com www.ismailfazal.com www.linkedin.com/in/ismailfazal/ +971585903838 / +17866676786 1st July 1991, Single, Indian English, Hindi, Urdu International Driving License

As an Architect, I am profoundly dedicated to the transformative potential of architecture, research, and design thinking in engendering salutary global change. My variegated experiences have immensely enriched my professional odyssey, refining my skills and molding me into a perspicacious, well-rounded designer, I advocate for the amalgamation of holistically impactful ideas through a multidisciplinary, research-driven, and collaborative design process.

My mission as an Architect is to shape the built environment with stunning, functional designs, visionary ideas, and impactful policies. I am committed to pursuing excellence and deep engagement in my field.

SKILLS & SOFTWARES

- Submit and acquire authority NOCs and building permits from Municipality and Civil Defense.
- Prepare BOQs, specification sheets. and site reports.
- Project Management & managing site workforce effectively.

DRAWING, 3D MODELING & BIM

AutoCAD Revit BIM Rhino Sketchup Pro 3ds MAX ArchiCAD Dynamo Grasshopper Grasshopper RENDERING & WALKTHROUGH LumiON Vray (360°)

Cinema4D Enscape (VR) Corona d5 Renderer Maxwell TwinMotion **EDITING / GRAPHICS**

Photoshop After Effect Illustrator Filmora Video MS Office Web Design

ARTIFICIAL INTELLIGENCE

ChatGPT Midjourney Runway Custom GPT ClickUp Prome Al Perplexity Al

EDUCATION

BACHELOR OF ARCHITECTURE

MAULANA AZAD NATIONAL INSTITUTE OF TECHNOLOGY (NIT), BHOPAL, INDIA

HIGHER SECONDARY CITY MONTESSORI INTER COLLEGE

HIGH SCHOOL LUCKNOW, INDIA

LUCKNOW, INDIA

2006

EXPERIENCE (8+YEARS)

ROWAAD AL TASMEEM ENGINEERING CONSTULTANT SHARJAH, UAE

PROJECT ARCHITECT & INTERIOR DESIGNER July 2020 - Present I have worked with esteemed clients such as Sharjah Holdings and Majid Al Futtaim, managing projects from the conceptual stage through to execution. This includes architectural and interior design for commercial buildings, such as North Hub, and villas in Al Zahia, Sharjah. My responsibilities covered designing modern and classic spaces for both villas and commercial buildings. Additionally, I handled client presentations on space requirements, developed proposals, and supervised the finalization of materials and quantity calculations post-approval.

Architectural Design · Interior Design · 3D Visualization · Project Management Building Information Modeling (BIM)

MULA DESIGN, DUBAI, UAE

ARCHITECT & INTERIOR DESIGNER March 2019 - July 2020 I specialized in theme-based villa designs in Dubai, Al-Ain, and Abu Dhabi, utilizing the latest technological materials to enhance efficiency and visual appeal. My expertise includes creating 3D models, detailing architectural and joinery drawings, and conceptualizing projects using CAD and BIM. Notable projects include the Audi Exhibition Stand at Dubai Design District for Design Week 2019 and the Women Cultural Hub. We were runner-up at the Al Quoz Art Fest and have developed various design proposals for prominent clients such as RTA Dubai, Dubai Future Foundation, and the Prime Minister's Office.

Exhibit Design · Build Projects · Interior Design · 3D Rendering · Research

HTM DECORATION LLC, DUBAI, UAE

JUNE 2017 - OCT 2018 ARCHITECT

Conceptualizing plans, Interiors, civil work & designing all joinery works, preparing drawings and 3d views, walk-through, BOO, MEP details and getting approval from Building / Society Management, TECOM, Civil Defense, DEWA or SEWA and follow up with clients and execute projects uptil handling of the Office fitouts / Showrooms / Residences / Clinics of esteem clients as Ministry of Interiors (Al-Dhaid Police Station), Al-Ghurair Construction, Manchester Tower, Sharjah Equine Hospital, Al-Furjan, Stiffness, & Damac Hills, etc.

Design Analysis · Interior Fit-out · Commercial Interior Design

ASTRO ARCHINEERS, LUCKNOW, INDIA

ASSISTANT ARCHITECT MAY 2015 - MAY 2017 I have worked on the conceptualization, planning, and interior design of various commercial buildings, bus terminals, recreational zones, government institutions, and office complexes. My expertise also extends to creating detailed 3D visualizations and comprehensive township planning, ensuring cohesive and innovative design

solutions tailored to each project.

JUNE 2014 - APRIL 2015

Actively collaborating with the team to ensure the successful completion of working drawings, while also contributing to the development of interior design concepts. I played a key role in preparing and refining comprehensive competition presentations, ensuring that our submissions are both innovative and visually compelling.

Build Projects · Design Analysis · 3D Modeling · Urban & Project Planning

ARCH-EN-DESIGN, LUCKNOW, INDIA

TRAINEE ARCHITECT

MAY 2012 - OCT 2012

Learned working drawing, elevations, sections, planning, sheet composition competition presentation & site visits of various Government Buildings.

Architectural Drawings · Presentation Skills · Architectural Design

ACHIEVEMENTS

- Member of Project Management Institute (PMI).
- PMI Talking to Al: Prompt Engineering for Project Managers
- PMI Data Landscape of GenAl for Project Managers
- Registered with Council of Architecture (C.O.A.), New Delhi, India.
- Minority Welfare Scholarship for Bachelor of Architecture in India.
- Participated in International Conference Rapid Advances in Sustainable Architecture, Jalandhar, 2011.
- Workshop attended on Sustainable Architecture by Todd Skyes from California at NIT Bhopal, 2012.
- Interviewed & Featured in Times of India, Dainik Bhaskar, NavBharat print media of India for Application Development.

www.ismailfazal.com/resume

RETAIL COMPLEX

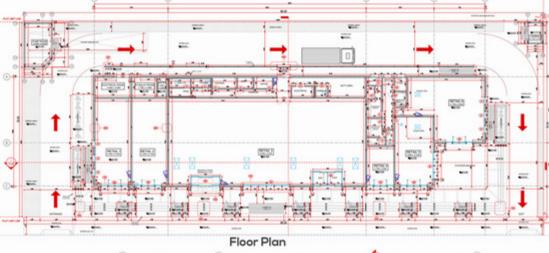
NORTH HUB - AL ZAHIA, SHARJAH



NORTH HUB

Majid al Futtaim and Sharjah Holdings proposed the development of a retail complex to cater to the Al Zahia community. Our design adopted a strip mall configuration, strategically situating essential services like the pharmacy and laundry on one end, with the anchor tenant, Carrefour, centrally positioned. At the opposite end, the food court was designed to include outdoor seating, enhancing the user experience.





The design was rigorously developed, with comprehensive MEP (Mechanical, Electrical, and Plumbing) coordination undertaken from the outset. The structure was entirely precast, featuring slab spans of up to 14 meters, ensuring both efficiency and structural integrity.



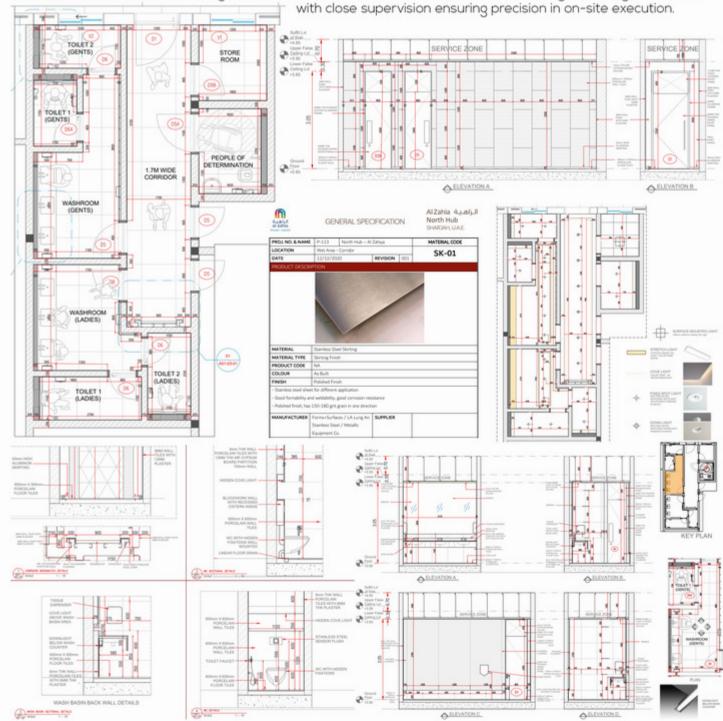








Designed to withstand heavy public usage while prioritizing convenience, the wet area features meticulous attention to every detail of the interior design. Each material was carefully selected to meet the highest design standards,



RETAIL COMPLEX

NORTH HUB EXTENSION - AL ZAHIA, SHARJAH



NORTH HUB EXTENSION

Building on the success of North Hub's design and execution, a separate extension was proposed on a new plot that exceeds twice the size of the original. This substantial expansion allows for a significant increase in commercial spaces, along with the addition of a terrace dedicated to a vibrant food court.





The design approach was meticulously planned to ensure that the new, larger structure harmonizes with the existing building creating a seamless transition between the original architecture and the modern, innovative design of the extension. This careful integration not only enhances the overall aesthetic but also optimizes functionality, offering a cohesive experience for users across both spaces.



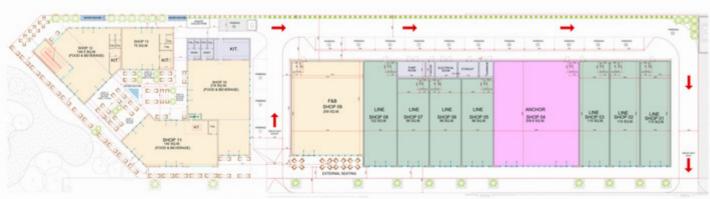












NORTH HUB EXTENSION - GROUND FLOOR PLAN

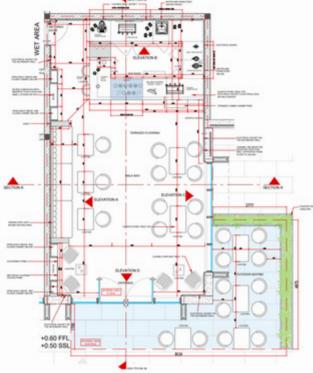


BEAN FARM



BEAN FARM

Designed and executed the fit-out of the North Hub Coffee Shop, adhering to a minimalistic theme while strictly following all rules and requirements. Every detail was meticulously considered, from seating arrangements and counter design to ceiling finishes, ensuring a cohesive and functional space.







A comprehensive lighting study was carried out to elevate the aesthetics, comfort, and ambiance of the coffee shop. The goal was to create an inviting and enchanting atmosphere that would enhance the overall customer experience. The lighting design was carefully tailored to complement the minimalist theme, with attention to both functional and decorative elements.

This approach ensured that the space not only provided optimal illumination for various activities but also contributed to the shop's unique character and appeal.



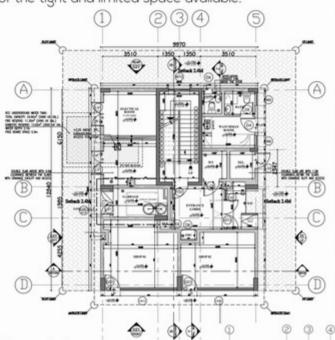
RESIDENTIAL BUILDING

AL MUJJARAH, SHARJAH



FARIDA BUILDING

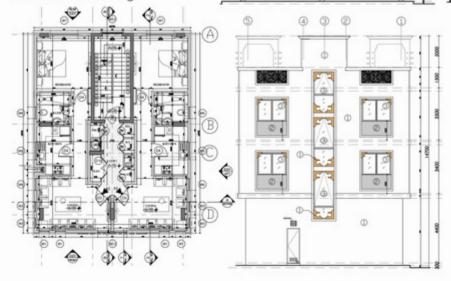
Designed a G+2 residential building with a ground-floor shop, carefully optimizing the layout to make the most of the tight and limited space available.

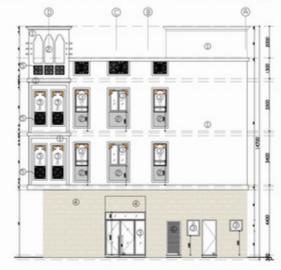




The design was carefully developed to meet the space requirements set by both the municipality and the client. Every aspect of the layout was optimized for functionality within the limited area. The elevation design was crafted to reflect the classic heritage architecture of the Emirates, blending traditional elements with modern features. This approach honored the region's cultural significance while providing a functional space for contemporary living.







MUWEILAH BUILDING

Designed a G+5 building that adhered to the latest green building norms established by town planning regulations. The design thoughtfully integrated the architectural aesthetics of the surrounding area, blending traditional elements with modern features to create a cohesive and harmonious structure. On the top floor, the building featured a penthouse with an expansive terrace garden, offering residents a luxurious outdoor space and enhancing the overall living experience. The incorporation of sustainable practices and modern amenities ensured that the building met contemporary standards while maintaining a connection to the local architectural













AL WARSAN BUILDING

The 3D model of the building was developed in Al Warsan, Dubai, incorporating a well-thought-out layout that included a ground floor dedicated to commercial use. Above this, one level was allocated for parking to accommodate residents and visitors. The design featured five floors of residential flats, each carefully planned to optimize space and provide a comfortable living environment. This comprehensive approach ensured that the building was both functional and visually appealing, aligning with the needs of the community and the standards of contemporary urban design.



MAHROUKI - SHARJAH



MAHROUKI

The villa concept is centered around a cohesive theme, integrating modern and minimalist architectural styles. The design emphasizes open, expansive spaces, with every detail carefully considered to enhance and redefine luxury.





The interior design and execution of the villa were carried out with a refined palette of grey, off-white, and gold accents. The design incorporated unique elements throughout the space, creating a sophisticated and cohesive aesthetic.

















AYOUB - SHARJAH



AYOUB VILLA

The villa was designed in a neo-classical style, incorporating a range of luxurious spaces including a majlis, saloon, dining area, study, and a grand entrance featuring an elegant staircase. The design included distinct themes for the master bedroom and separate rooms for boys and girls, each thoughtfully curated to reflect an elegant and harmonious atmosphere.

























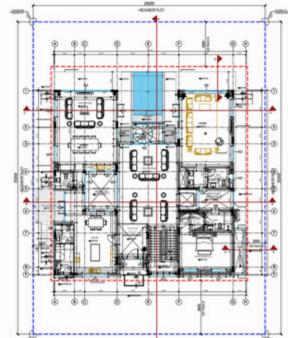




SHARJAH



OFFICE WORK

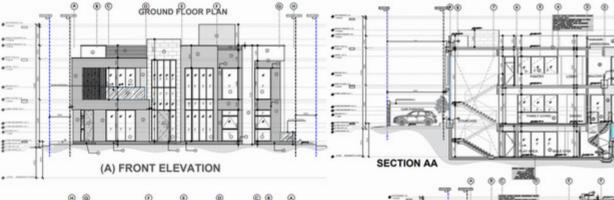


HARIS SAEED - AL ZAHIA

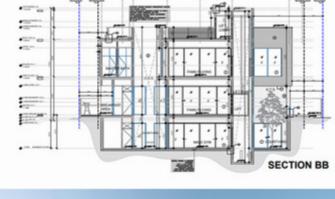
This luxurious villa was meticulously designed to include a grand hall on the ground floor, serving as a focal point for impressive gatherings and entertaining. The basement is outfitted with a state-of-the-art gym and additional sports facilities, offering a comprehensive recreational space. The villa features a beautifully integrated swimming pool that connects directly to the basement level, complete with a sauna and dedicated bathing area for ultimate relaxation. The modern elevation of the villa is complemented by a spacious lower deck, designed with ample seating around the pool, creating an inviting and elegant outdoor retreat. Each element of the design contributes to an overall sense of grandeur and sophisticated comfort.















ABDALLAH AL SHAMSI

The villa was carefully designed from the initial concept through to the complete interior detailing, spanning 500 square meters across two levels. The design showcases a grand courtyard that serves as a focal point, while the interiors exude luxury and sophistication. Key areas within the villa include a majlis, a spacious living room, an elegant dining area, and a master suite, each crafted with attention to detail and functionality. The staircase, a prominent feature, complements the overall design. The aesthetic theme is characterized by a refined palette of light wood, off-white, and gold, which is thoughtfully applied throughout the villa to create a seamless and opulent environment. This approach ensures that every space within the villa reflects a harmonious blend of elegance and modernity.















THE ANCHOR - UMM SUQEIM, DUBAI



THE ANCHOR

The villa concept is anchored around a central theme, with the design approach blending modern, minimalist, and brutalist architectural styles. The layout prioritizes expansive spaces, while each element is meticulously detailed to redefine and elevate luxury to the next level.



The villa features a grand entrance that opens into a double-height indoor space, allowing unobstructed views through to the end of the plot where a swimming pool is located. This seamless visual flow creates an expansive and luxurious feel, even within a limited footprint.

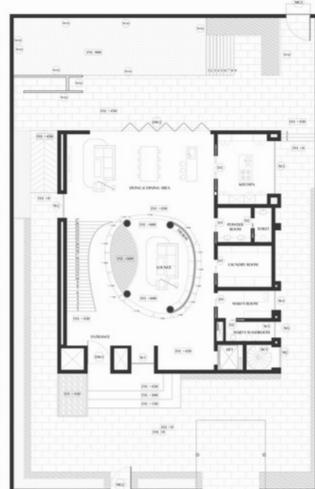
The large spans and asymmetrical anchor design posed significant technical challenges, requiring in-depth exploration and research into advanced construction technologies. This approach enabled us to align the conceptual design with the client's budget, balancing innovation with cost-effectiveness.



We used 14-meter hollow core slabs, known for their lightweight and high strength, to enhance structural efficiency and deliver significant project benefits.









The Anchor came from up to down bringing in the natural sky light, it consisted of lounge and indoor garden, giving three sided view, pool on one side, staircase at one and vertical glass light from the entrance side. The above deck is designed to give the feeling of an outdoor gym but within the approach of the Master Bedroom and enclosed central area of house.





Ground floor was designed to seamlessly blend the entrance foyer to lounge, living area with full exposure to outdoor seating and pool giving the whole area as a single big space.





The master Bedroom had it full glazing at one side from which the pool is visible, the interior was kept to minimal but unique in style, with small frame and linear arranged ceiling with specific spots for low and high light as per human usage, multiple cabinets for different needs in the dressing area. Skylighted washroom with external visibility.



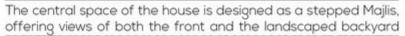


AL AIN & DUBAI



Inspired by the rugged mountains and earthy materials of Al Ain, we drew on their bold, robust nature for this villa's design. The villa incorporates dark, hard textures that evoke strength and dominance, allowing it to blend seamlessly with the natural stone and earth surroundings, creating a striking camouflage effect within the landscape.









Metal grid rotating doors serve as a versatile partition between the parking and entrance areas of the house. When closed, they function as a partition wall, and when opened, they seamlessly connect the two spaces into one.



This Abu Dhabi villa, designed for six sisters, seamlessly blends. Arabic and contemporary architectural elements in its elevation. The layout features expansive spaces with carefully zoned areas, while the interiors evoke a palace-like ambiance, complemented by the luxury of modern appliances and bespoke furniture designs.



The Majlis and living spaces were designed to maximize natural diffused light, with the option to open the glass walls, seamlessly merging the living area with the adjacent water feature. Expansive spans were dedicated to green spaces and hardscapes, enhancing the connection between indoor and outdoor











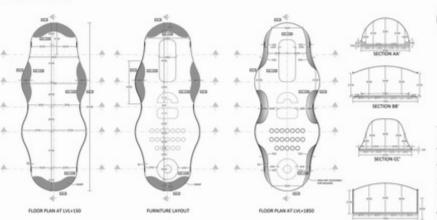
EXHIBITION & MONUMENT

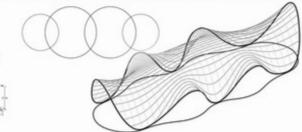
AUDI INNOVATION HUB, GAFLA, HIGHNESS MONUMENT



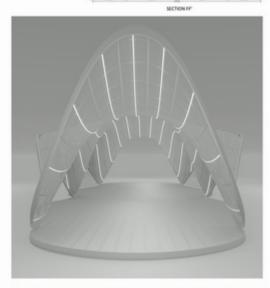
AUDI INNOVATION HUB

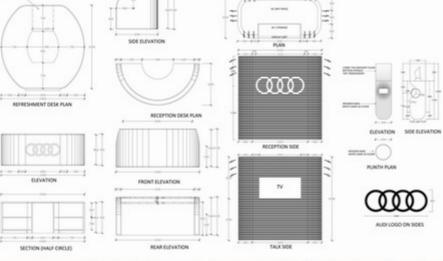
For Dubai Design Week 2019, Audi Middle East aimed to showcase their inaugural electric vehicle. We designed and executed a grand innovation hub, spanning 20 meters at the heart of Dubai Design District, to highlight their latest innovation.





The design of Audi's innovation hub centered around the iconic four circles logo. By enlarging the inner circles, we framed the shapes to form the platform body and incorporated elevated points for access and circulation. The outer structure was interpolated from these points, with the contouring reflecting the serene essence of the E-tron, creating a harmonious and dynamic visual experience.

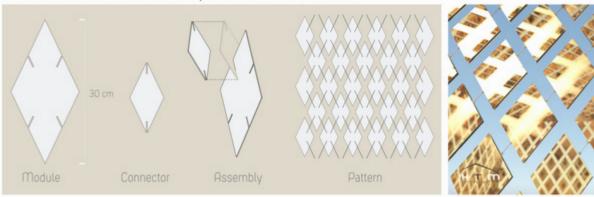


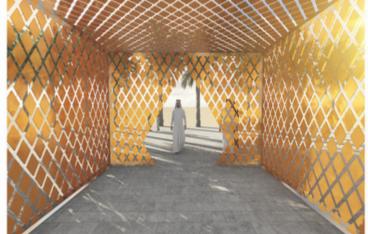


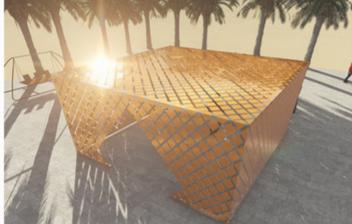


GAFLA - THE ARABIAN JEWELLERY

For Dubai Design Week 2017, the stand drew inspiration from the Baraag collection, with the rhombus shape as its design foundation. Mirrored surfaces created a dazzling effect, amplifying the sense of wonder as visitors approached the jewelry displays. The repetition of this geometric form formed a cohesive matrix, providing an immersive and subconscious experience of the collection.







VISION OF TOMORROW

The design competition for the monument was inspired by the vision of His Highness Sheikh Mohammed bin Rashid Al Maktoum of Dubai. The concept features towering acrylic tubes, illuminated at varying heights, pointing skyward to reflect Dubai's ambitious skyline. From a distance, the monument reveals a clear depiction of Sheikh Mohammed's face, while up close, it displays an intricate pattern of random black pentagon lines. This freelance work, developed for Architect Abdalla, was shortlisted for the next stage.







INTERIOR DECORATION

JIU-JITSU, MANCHESTER TOWER, AL-GHURAIR SHOWROOM



MATADOR JIU-JITSU ACADEMY, DUBAI

The brief called for a state-of-the-art training facility that integrates fitness and lifestyle amenities. The design includes a juice bar and a range of training classes, both mixed and segregated, accommodating all genders and age groups from 3 to 50+.

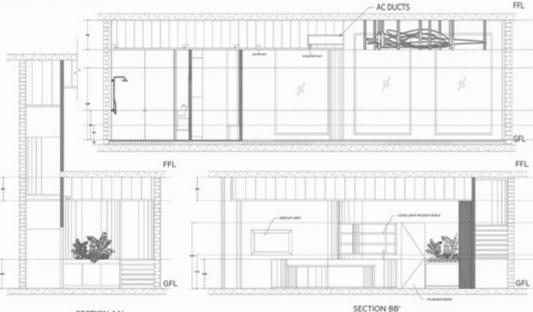
" $J\ddot{\mathbf{u}}$ " translates to "gentle, soft, supple, flexible, pliable, or yielding," while "jutsu" means "art" or "technique." Jiu-jitsu embodies the art of using movement to leverage an opponent's force against them, enabling effective control and takedowns regardless of their strength or size.







"Jū" translates to "gentle, soft, supple, flexible, pliable, or yielding," while "jutsu" means "art" or "technique." Together, they signify an approach that focuses on using the opponent's own force against them rather than confronting it directly with one's own strength.











MANCHESTER TOWER, MARINA, DUBAI

Stratum, the building management, initiated the ground floor renovation of Manchester Tower. We proposed a new ceiling design, along with custom reception counters and waiting area furniture, complemented by modern lamps and planters.

The concept focused on a modern yet simple ceiling. The front reception featured an acrylic backlit bulkhead paired with twin downlights and cove lighting. The back entrance and passage followed the same linear design with matching bulkhead and downlights.











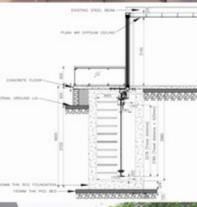
AL-GHURAIR SHOWROOM

Al-Ghurair Construction Aluminium LLC in Dubai wanted to showcase their upcoming products, HIRT Descending Windows and SkyFrame, within their factory. The interior design was kept minimal to ensure the focus remained on the products. Rail lights and Belux updown pendant lights were installed on a plain ceiling, with concrete-finished flooring. The space was divided into two sections: one meeting room featuring SkyFrames and a showroom displaying the descending window.



Designing and constructing the machine room for the descending window was challenging due to the product's novelty. We collaborated directly with the Swiss manufacturer and worked closely with the client to achieve the desired design.









OFFICES

AJMAN OFFICE, STIFFNESS WATER SUPPLY OFFICE



With extensive experience in office interior design, from the conceptual stage to fully understanding and adapting to client requirements, here are some of the best projects we've completed.

AJMAN OFFICE

The office design featured distinct areas defined by varying flooring and ceiling patterns. The entrance, including the reception and waiting area, was highlighted by wood bars extending from the walls to the ceiling, seamlessly integrating with the custom furniture layout. Workstations were designed to accommodate four staff members, with custom ceiling lights, while other offices were given a modern, minimalist aesthetic. The MD's office was arranged to include space for her secretary and a meeting area. One wall, featuring existing circular openings, was enhanced with differently sized circular wood rings, adding an artistic touch.





Reception Area

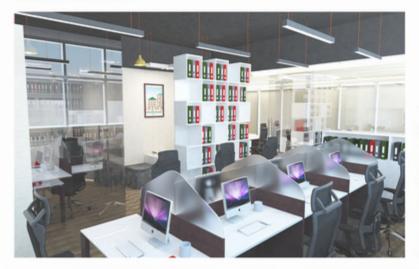


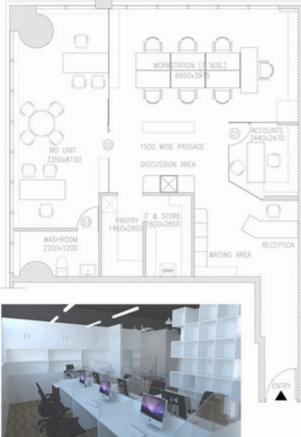


STIFFNESS OFFICE

The office design concept focused on a dual-tone color scheme and clearly defined spaces, optimized for the available area. Custom-designed furniture was used throughout. Workstations were positioned away from direct sunlight glare, accommodating six staff members and one manager, with ample cabinetry. The design featured an open ceiling in the work area and a bulkhead in the MD's room, which also included a circular meeting table.

From concept design through approvals from various authorities such as TECOM, DEWA, and building management, to the final fit-out.













PROPOSAL'S

OOUZ ARTS FEST, CREATIVE HUB, DUBAI FUTURE FOUNDATION & SAUDI ART CENTER

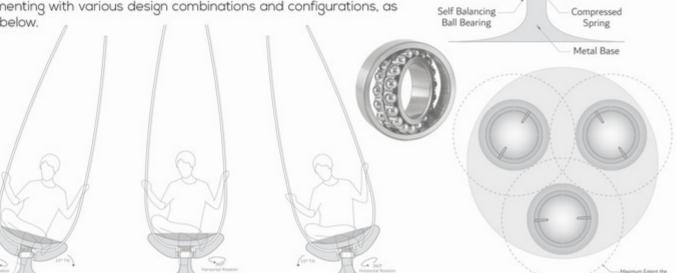


Coated Metal

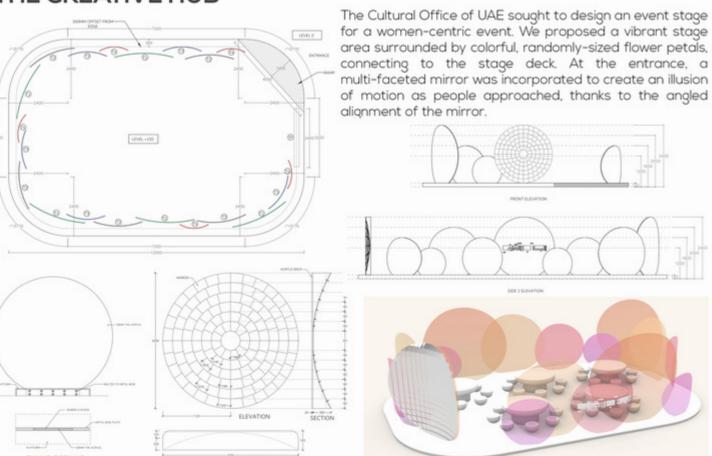
Competitions offer an excellent opportunity to showcase design from a fresh perspective, moving beyond traditional approaches. By integrating new technologies with existing tools, we can create innovative, engaging, and interactive

QOUZ ARTS FEST 2020

For the public seating project in Al Qouz, we first conducted a site visit to understand the area's characteristics. We utilized locally available materials, including self-aligning ball bearings and funnels, experimenting with various design combinations and configurations, as shown below.

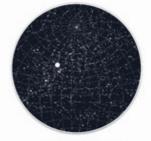


THE CREATIVE HUB



DUBAI FUTURE FOUNDATION

The proposal called for a futuristic art installation to be placed at the central atrium of Emirates Tower, located at the entrance of Area 2071.



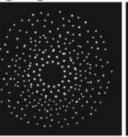


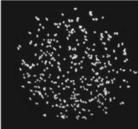


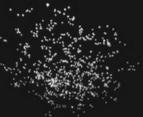
The concept, "Star Map," reflects human curiosity and our relentless quest for the future. People are driven by an innate desire to explore and secure new opportunities, constantly seeking shelter, employment, and amenities. Our space research

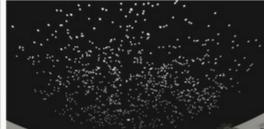
symbolizes this journey, pushing the boundaries of exploration and

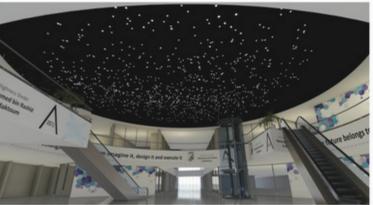
The Dubai Centenary concept uses star maps to offer a futuristic glimpse of 2071, serving as a metaphor for stargazing into the future.









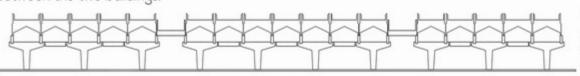


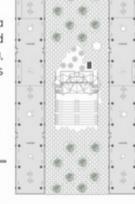
The lights, varying in size to represent stars, will transition from those visible in 1971 to those expected in 2071. They will smoothly move toward the center and then return to a star map depicting both current and predicted star positions.

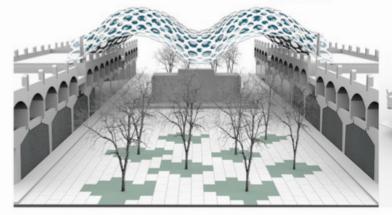


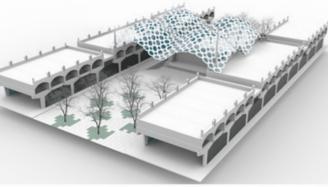
SAUDI ART CENTER

The two old market buildings, formerly used for selling produce, will be converted into a 120-meter-long art gallery, featuring a glass facade that retains the original arches and columns. The central parking area will be redesigned into a community space, services area, and open-air theater (OAT), all covered by a single, algorithmically-designed roof that spans between the two buildings.









BUS STATION

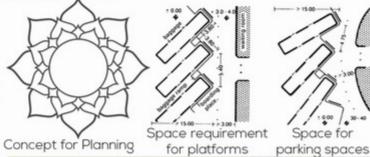
ETAWAH, MAINPURI, KASGANJ - INDIA



The Government of Uttar Pradesh, India, initiated a plan to upgrade and modernize bus stations across the state. We competed successfully and were awarded several projects. Here are three major stations, each designed with a unique approach tailored to factors such as land shape and orientation.

ETAWAH BUS STATION

This project was significant and high-profile, being in the constituency of the former Chief Minister of the state. To ensure uniqueness, we adopted a lotus-themed design, reflecting its status as India's floral emblem and its central role in Indian religions such as Hinduism, Buddhism, Sikhism, and Jainism.







The bus station was designed in a circular pattern, with buses arranged around the outer "petals" of a lotus-shaped structure, providing shelter for the vehicles. The middle ring housed administrative and official departments on the ground floor, with restrooms and hotels on the upper floors. The center featured an atrium topped with a dome to allow natural light in. This central space also included a public restaurant and water fountains, enhancing the interior's aesthetic appeal.

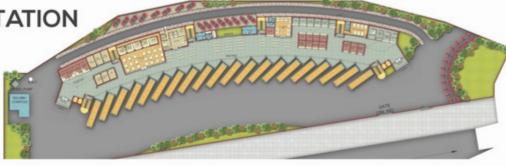


The design faced the challenge of ensuring proper bus circulation within a limited square space. It was arranged in a three-faced linear configuration, with one side dedicated to a food court and restaurants. The central area was designed for administrative and office use, featuring a courtyard-style layout.



KASGANJ BUS STATION

The station was designed in a semi-curved shape accommodate the available land and road access. The design focused on maximizing adjustments while maintaining functionality and efficiency.



EDUCATIONAL CAMPUS

ARABI-PARSI UNIVERSITY, PATNA & SAINIK SCHOOL, JHANSI

The Minority Welfare Department of Bihar, India, planned to build Arabi-Parsi University in Patna to support minority upliftment. The 1. MAN BOTTON university will offer diploma, undergraduate, and postgraduate programs, with facilities including gender-specific hostels and staff residences.

MAULANA MAZHARUL HAQUE ARBI & PERSIAN



Named after a distinguished figure who was a legal expert, statesman, educator, journalist, poet, and philosopher, the planning incorporated the traditional Indo-Islamic triple dome design. The central dome, the largest of the three, was prominently featured the overall layout.



The concept was inspired by the educational programs offered, with Indo-Islamic or Mughal architecture chosen for its relevance. The design blended this traditional style with modern, sophisticated planning. Key features include three domes, jali work, grand entrances, and distinctive building elevations.

Site Layout

OFFICE WORK

SAINIK SCHOOL, JHANSI

6. ADMINISTRATIVE BUILDING 7. ACADEMIC BUILDING 8. LIBRARY & LABS 9. CANTEEN 10. VOLLEYBALI 11. BASKETBALL COURT 12. LAWN TENNIS COURT 14. HORSE RACE COURSE 15. HORSE SHED 16. SHOOTING RANGE 17. SPORTS COMPLEX

18. AUDITORIUM 19. CENTRAL LANDSCAPED COURT

20. 3 BEDDED RESIDENCE 21. BACHELOR'S QUATER

23 GRADE 4 RESIDENCE

27. PLAYGROUND AND PARK

28. 5 BEDDED RESIDENCE 29. 4 BEDDED RESIDENCE

24. DORMITORY MESS

25. BOYS DORMITORY 26. GUEST HOUSE

30 LANDSCAPE 31. WATER TANK

The army school was designed to balance educational and sports facilities, allocating more space for sports activities compared to academic buildings. The layout was organized into three zones: Sports and Student Activities (left). Academic, Administrative, Labs, and Library (center), and Dormitories and Staff Residences (right). The master plan featured a semi-circular arrangement connecting these zones via arc-shaped roads, A large playground was proposed for the flat land, while residences were placed on the more contoured areas.

