

PORTFOLIO

2017 - 2024

EZZAHAIR ANASS

Architect

PhD Student

3D Software Developer



EZZAHIR ANASS

ARCHITECT | PHD STUDENT | DEVELOPER

As an **architect** and self-taught **software developer** specializing in the intersection of **design** and **technology**, I create custom plugins, automations, and digital solutions for 3D software to **streamline** architectural Visualization and **3D design workflows**. Passionate about leveraging cutting-edge technology to enhance conceptualization and elevate the design process. I aim to combine my **architectural expertise** with **programming skills** to drive efficiency and push creative boundaries in the field.

TECHNICAL SKILLS

- Sketching & Conceptualization
- 2D Drawing (AutoCad | ArchiCad)
- 2D & 3D Diagrams (Illustrator)
- Post-Production (Photoshop)
- BIM Modeling (Revit)
- 3D Modeling (3ds Max | Blender)
- 3D Rendering (Lumion | Blender)
- Parametric Design
 - Rhino & Grasshopper
 - Blender Geometry Nodes
- Software Development
 - Blender | 3ds Max | Cinema 4D
 - Plugin Development (Python)
 - Version Control (Git)
- Web Development
 - Front-End (React JS & Typescript)
 - 3D Web Dev (ThreeJS)
 - Back-End (Google Cloud Platform)

LANGUAGES

- English (Fluent)
- French (Fluent)
- Arabic (Native)

CONTACT

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- 📍 17, 3 Av. Al Atlas, Sala Al Jadida, Hssaine
- 🌐 <https://linktr.ee/ezzahiranass>

PROFESSIONAL EXPERIENCE

3D Software Developer - Independent	JAN 2022 - PRESENT
• Plugin Development & Automation Agency • Software Development Services	
Junior Architect - ZADA Architecture	NOV 2021 - MAR 2022
• 3D Modeling & Rendering • 2D Drawings	• Project Documentation • Conceptualization
Intern - Engineering Agency: Stroydom Ingénierie	JUN 2021
• 2D Drawings • 3D Modeling	• Project Documentation
Intern - Agence Urbaine Sekhirate-Temara	JAN - FEB 2021
• Geographic Information System • Administrative Procedures	
2D & 3D Graphic Designer - Fiability Conseil	SEP 2019 - MAR 2020
• 3D Visualization & Animation • Branding: Logo & Flyer Design	
Intern - Architecture Agency: AtConcept	JUL - AUG 2019
• 3D Modeling • Interior Design	
Intern - Architecture Agency: Oulhaj Said	FEB 2019
• 2D Drawing • Project Documentation	
Intern - Construction Site: Yousra Li Tajhiz	JUN - JUL 2018
• Construction Site Apprentice	

ACADEMIC EXPERIENCE

PhD Student	JAN 2024 - PRESENT
Institut National de Statistique et d'Economie Appliquée - Rabat, Morocco. Researching Applications of Artificial Intelligence in Architectural Design Supervised by Pr. BENELALLAM Imade & Pr. ERRAJI Zakarya	
Architect	SEP 2016 - JUN 2023
Ecole Nationale d'Architecture de Rabat - Rabat, Morocco. Dissertation of a Final Year Project Entitled "Vers une Synergie Campus-Ville: Cas de la Zone de Jonction Technopolis-Sala Al Jadida"	
Baccalaureate	JUN 2016
Complexe Scolaire Khalil Abdelhafid - Sala Al Jadida, Morocco. Filière Sciences Physiques: Mention Très Bien	



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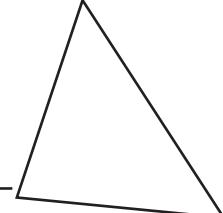
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ARCHITECTURAL DESIGN





As an architecture graduate from l'École Nationale d'Architecture de Rabat, I've developed a comprehensive skill set that seamlessly blends theoretical knowledge with practical application. My expertise spans spatial conception, public facility integration, circulation design, lighting strategies, material selection, and structural stability principles.

My final year project was a multifaceted challenge that demanded solutions across urban, landscape, and architectural scales. This project showcased my ability to navigate complex design hierarchies and create cohesive, multi-layered architectural solutions.

At ZADA Architecture, I honed these skills through active participation in national competitions, contributing to design decisions, floor plan development, and 3D modeling. Proficient in industry-standard software like ArchiCAD, Blender, and Lumion, I bring concepts to life with visual clarity and precision.

My approach to architecture is holistic, marrying aesthetic vision with practical functionality. I strive to create spaces that not only captivate visually but also enhance the human experience through thoughtful design, reflecting my commitment to architecture as both an art and a science.



OPPPT DE SAFI

ARCHITECTURAL COMPETITION

Outdoor Furniture Design (Blender)



Rendering Elevations (Blender)

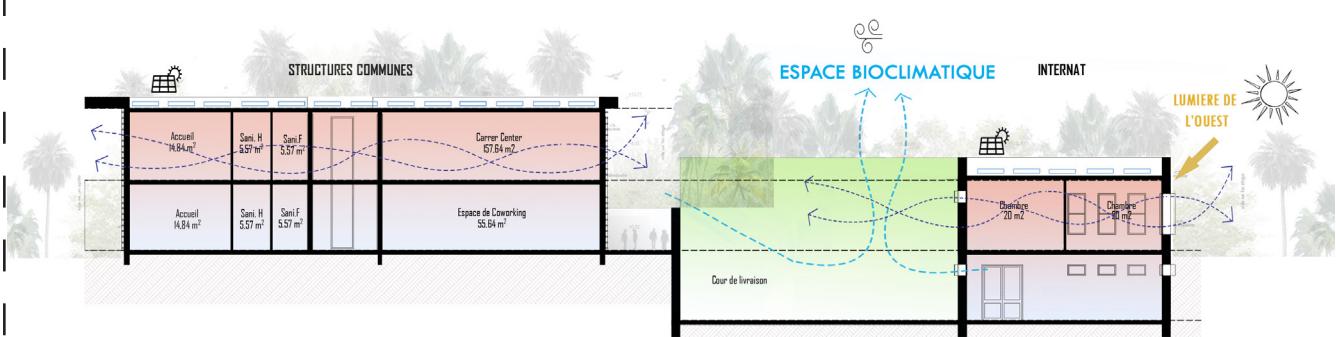
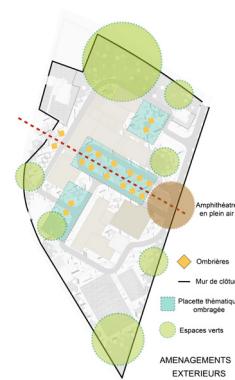
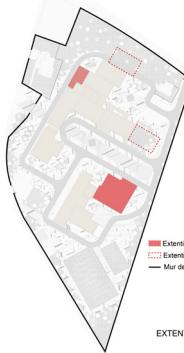
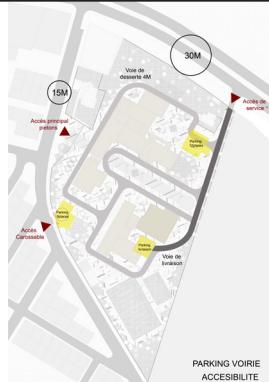
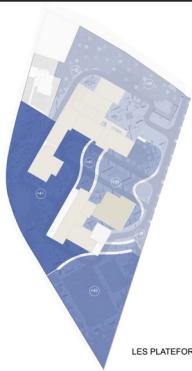


3D Rendering (Blender & Lumion)





2D Concept Diagrams (Photoshop)





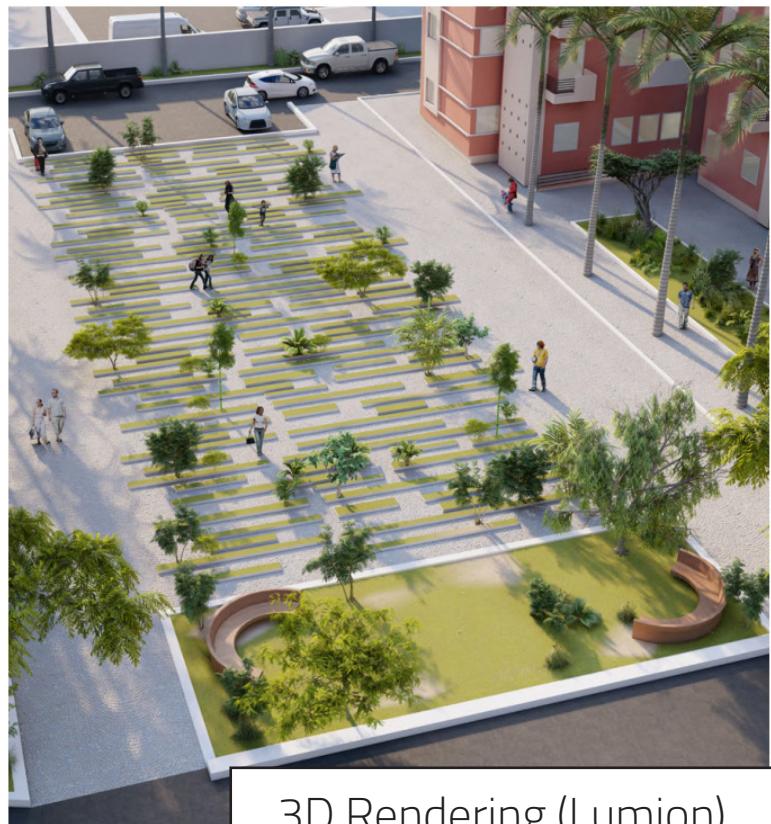
LOGEMENT MILITAIRE

ARCHITECTURAL COMPETITION WINNER

Award-winning project, now under construction, I contributed significantly to its design and visualization. My role encompassed spatial planning, exterior landscaping, and comprehensive 3D modeling. I led the façade and motif design, shaped the building's volume, and selected materials and colors. My work culminated in creating exterior 3D renderings and detailed façade visualizations, blending creative design with technical expertise to achieve a cohesive, functional, and aesthetically pleasing result.



3D Modeling (Blender)



3D Rendering (Lumion)

Facade Design & Rendering



1.3

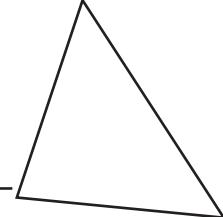


CENTRE D'ÉPANOUISSLEMENT MARJANE - SIDI SLIMANE

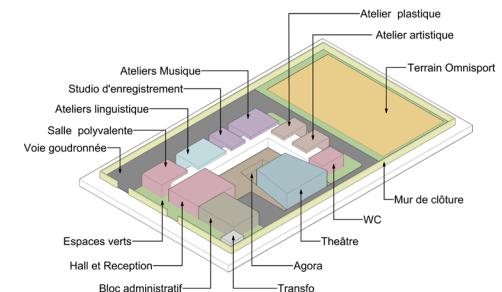
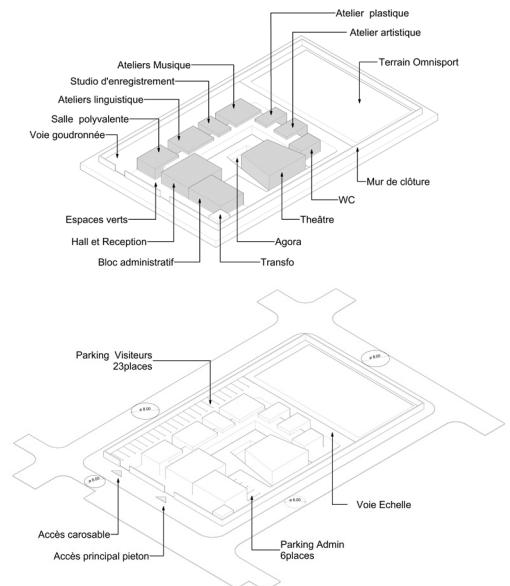
ARCHITECTURAL COMPETITION

Facade Design





2D Diagrams (Photoshop)

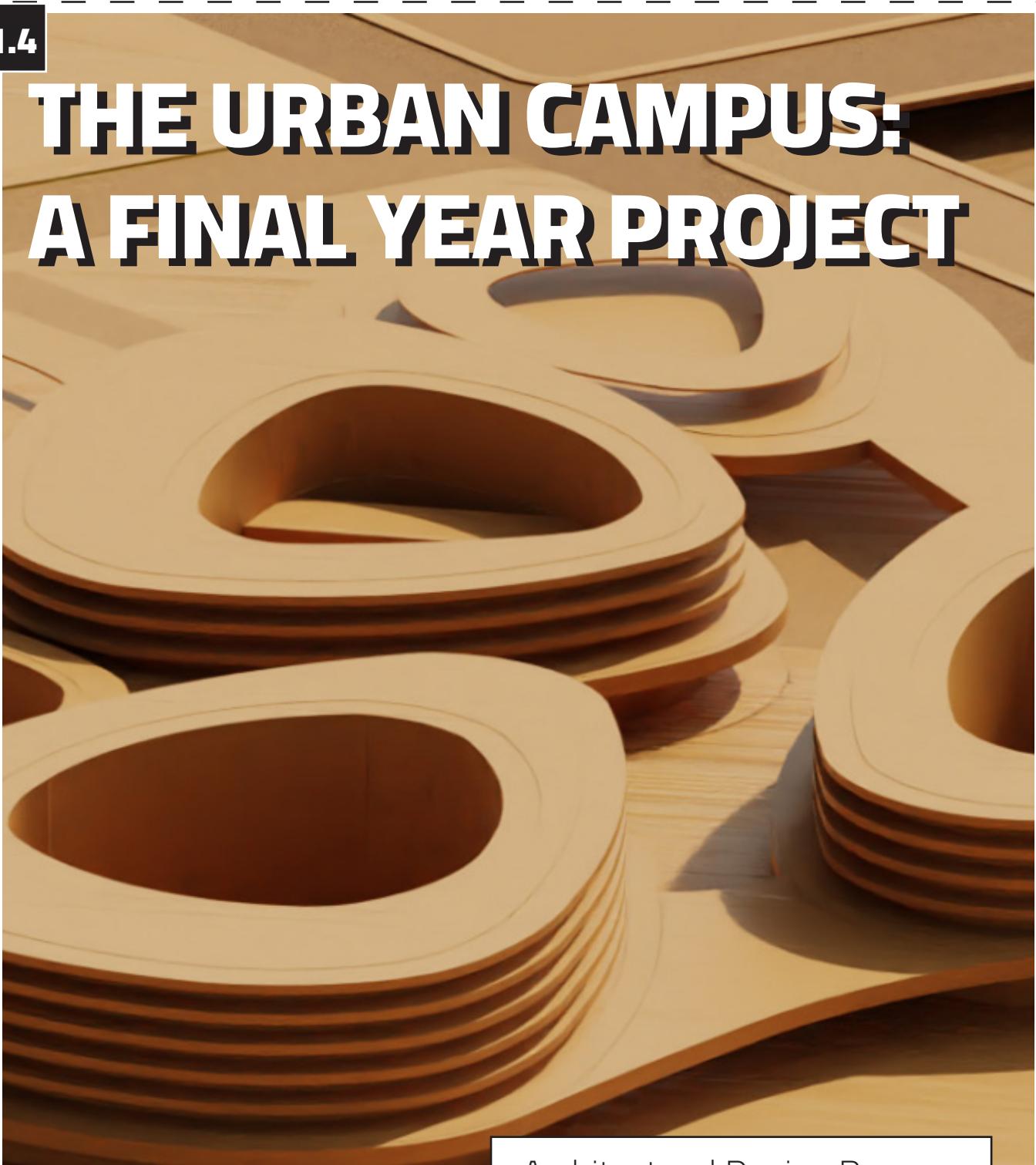


3D Modeling & Rendering (Blender & Lumion)



1.4

THE URBAN CAMPUS: A FINAL YEAR PROJECT



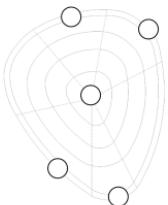
Architectural Design Process



FORME INITIALE



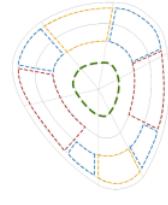
GÉOMÉTRIE/AXIALITÉ



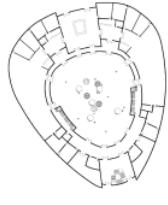
ACCÈS ET POINTS CLÉS



FLUX ET POROSITÉS



ZONAGE FONCTIONNEL



PLAN FINAL

2D Urban Analysis Maps (Photoshop)

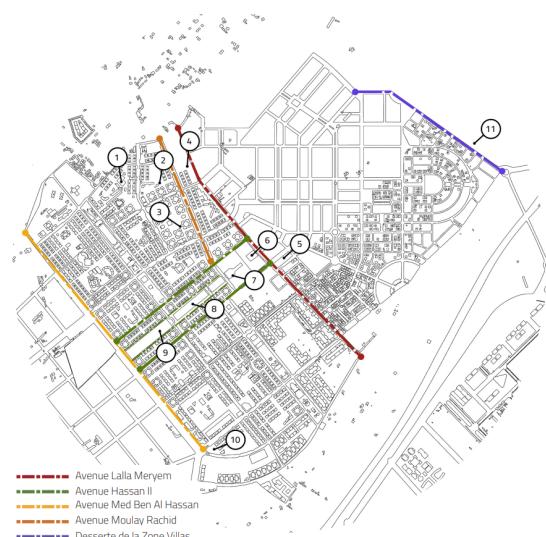
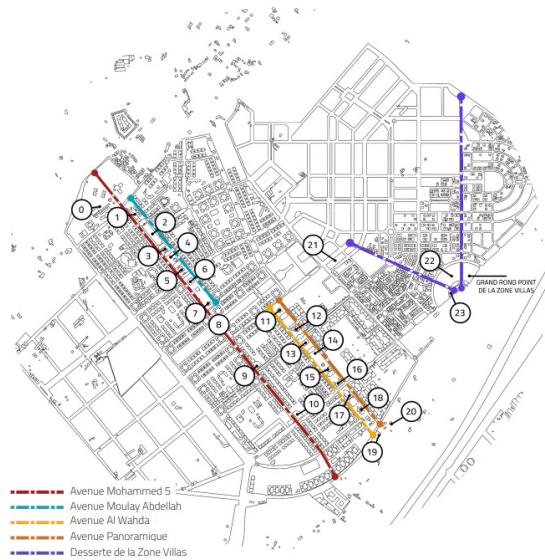
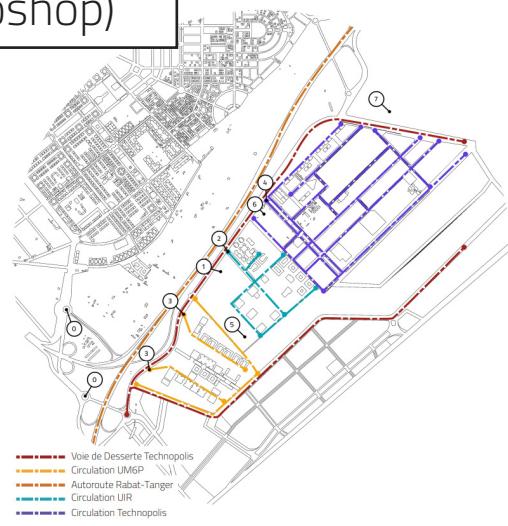
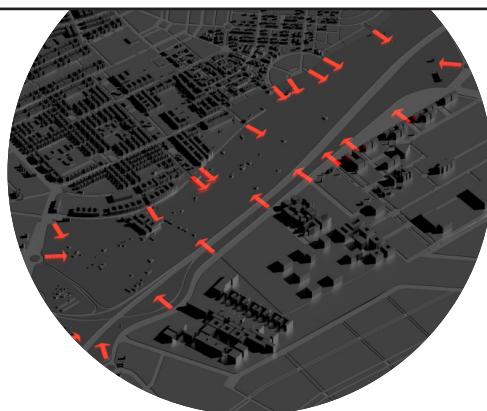


Figure 5.11: Programmation des Équipements en cœur d'îlots et en perspective des grands Axes © L'auteur

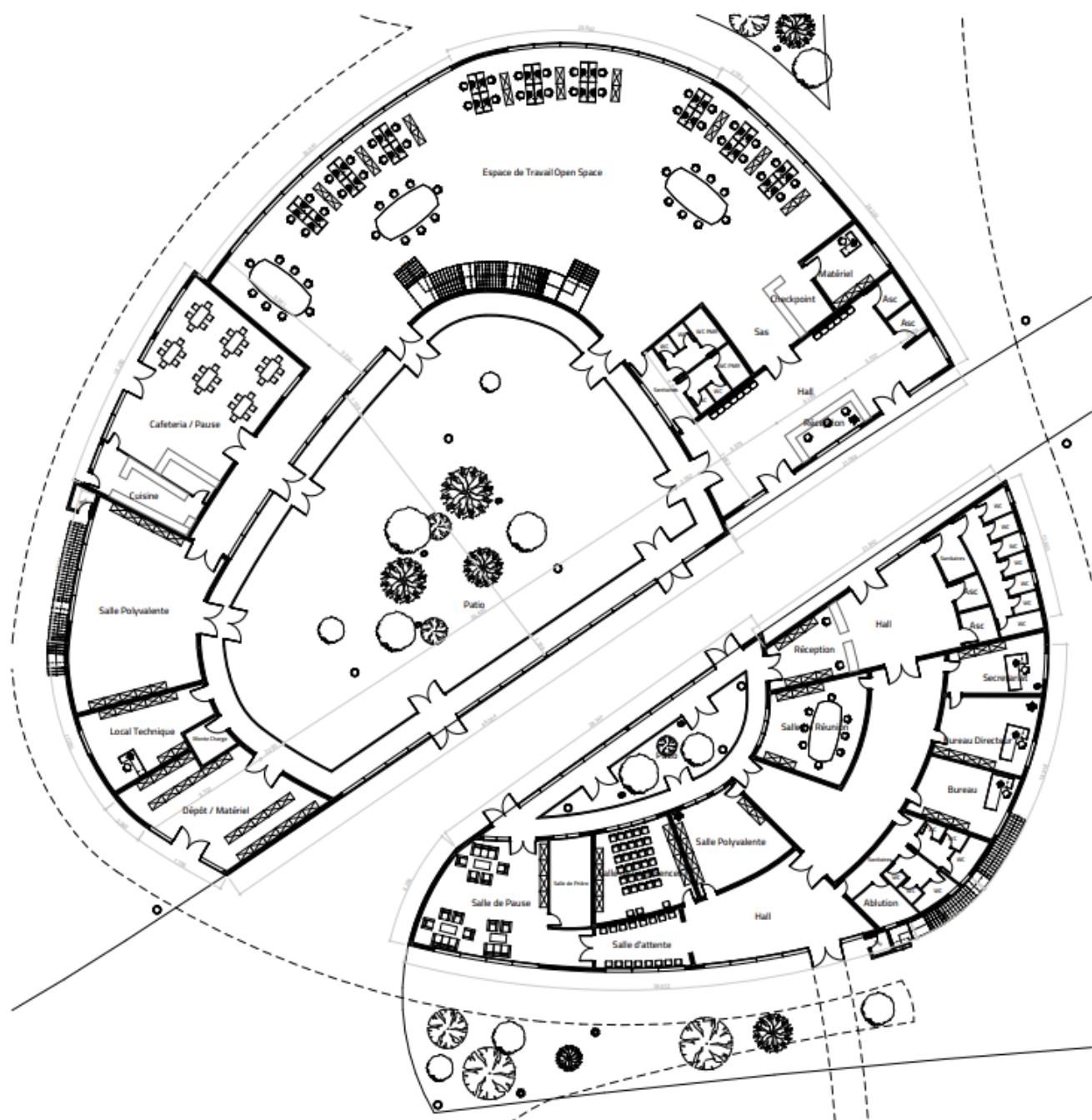
3D Urban Analysis Maps (Blender)





Architectural Plans (Archicad)

Architectural Plans (Archicad)

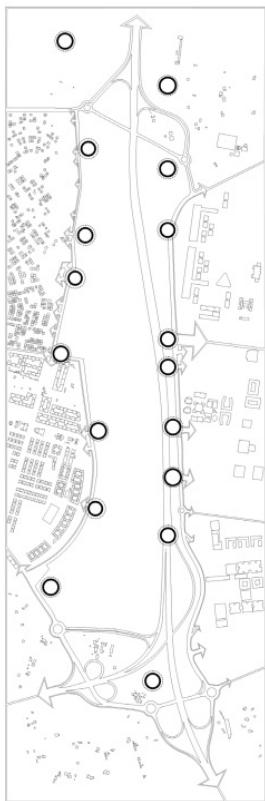




Outdoor Furniture Design (Blender)



Urban Planning Concept Diagrams (Photoshop)

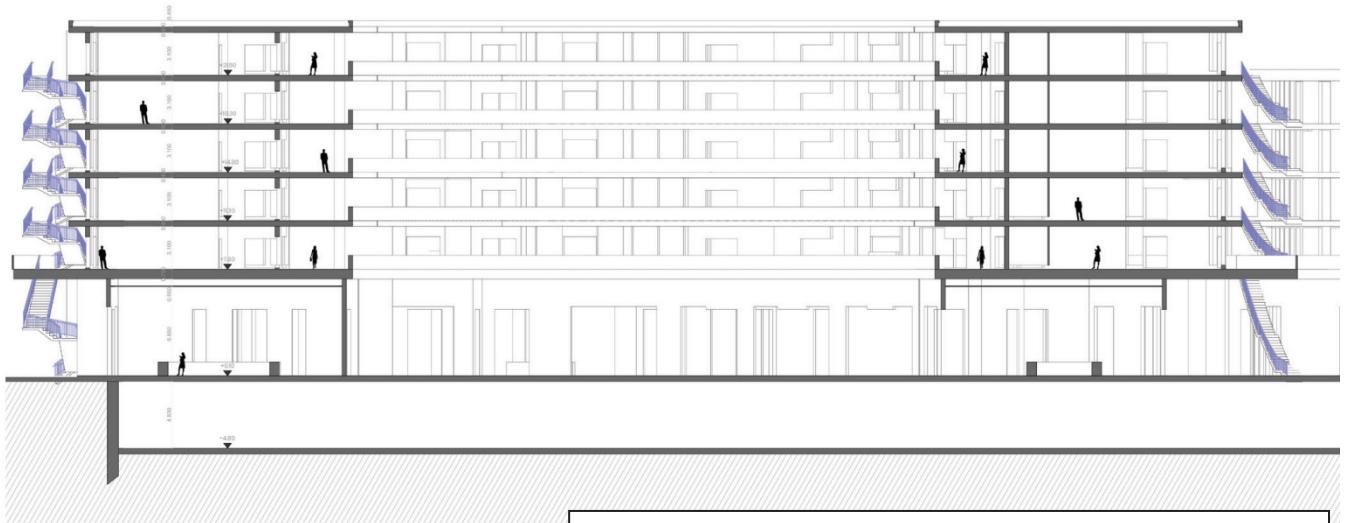


1. TERRAIN VACANT

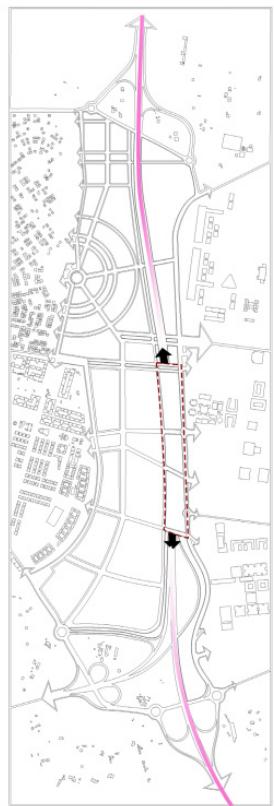
2. REVISION DU PLAN D'AMÉNAGEMENT

3. CORRIDOR VERT

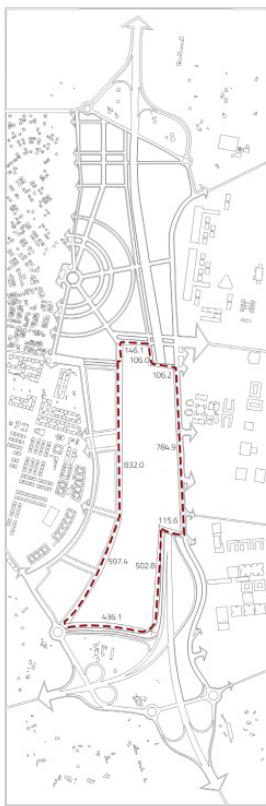
4. COEUR DU PROJET



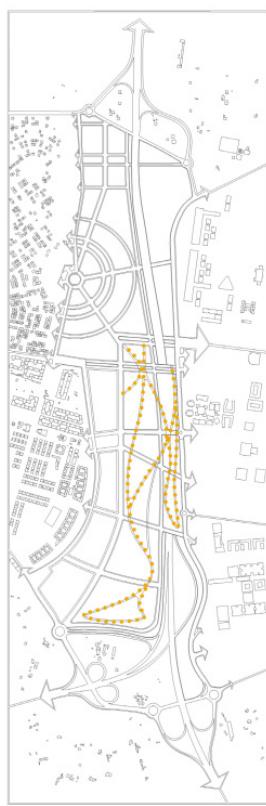
Architectural Sections (Archicad & Photoshop)



5. ENFOUSSEMENT DE L'AUTOROUTE



6. DÉLIMITATION DU SITE



7. RÉSEAU PIÉTONNIER



8. ZONAGE ET AMÉNAGEMENT



Urban Design Masterplan (Blender)



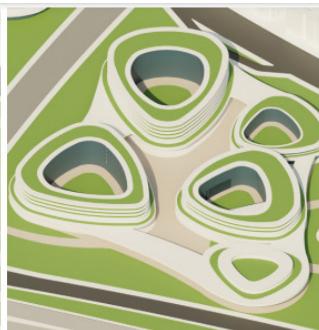
Pôle Santé et Bien Être

Complexe Socio-Sportif et
Terrains de Proximité



Pôle Culture et Jeunesse

Centre Culturel - Maison de Jeunesse,
Foyer Féminin et Centre de
Découverte pour Enfants



Pôle Formation

École Communautaire,
Médiathèque et Incubateur



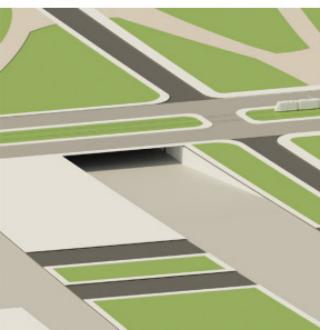
Pôle Commerce

Rénovation du Souk & Nouveau
Centre Commercial



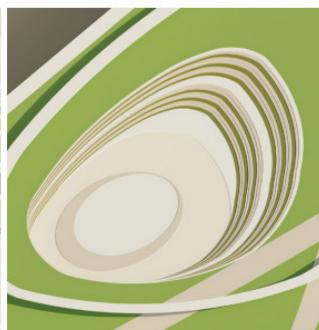
Traitement de Coupe

Entrée de la Trémie Routière
(Côté de l'UM6P)



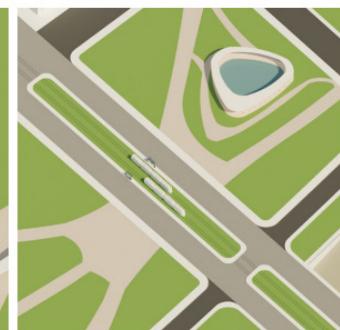
Traitement de Coupe

Sortie de la Trémie Routière (Côté
du Business Cluster)



Agora/Plaza

Lieu d'exposition, d'évene-
ments et de Célébrations



Mobilité Urbaine

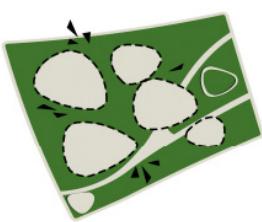
Extension de l'avenue Lalla
Meryem, itinéraire du Tramway,
et Station Multimodale

Architectural Design Process (Blender)



SITE

Le site d'intervention est délimité, traversé par le réseau piétonnier et flanqué du centre culturel, du complexe sportif, de la zone immeubles et de l'autoroute. Il se trouve à l'intersection de l'avenue Med 5 et fait face à l'UM6P.



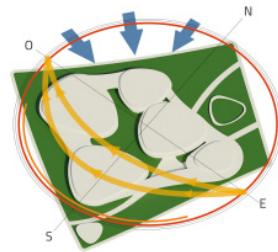
FRAGMENTS

Écho à la problématique elle-même, la conceptualisation part de la fragmentation existante pour atteindre l'articulation. Les blocs du projet sont disposés.



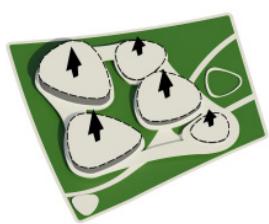
INTERCONNEXION

Les fragments sont interconnectés, formant une seule entité unifiée malgré la distinction. Le lien est matérialisé par une terrasse végétalisée partagée et ouverte à tous.



LUMIÈRE ET VENTS

L'étude de l'ensoleillement et de la ventilation naturelle permet d'amorcer la conception d'un bâtiment durable à faible impact environnemental, puisant sa force de la nature.



VOLUMÉTRIE

Extension des blocs en hauteur et manipulation des volumes en fonction du programme physique et des besoins. La hauteur est limitée pour une intégration paysagère respectueuse.



PATIOS

Les atriums intérieurs sont créés pour la ventilation et l'ensoleillement naturels au cœur des bâtiments, facilitant la circulation intérieure et offrant des connexions visuelles entre les espaces.



FLUX ET POROSITÉ

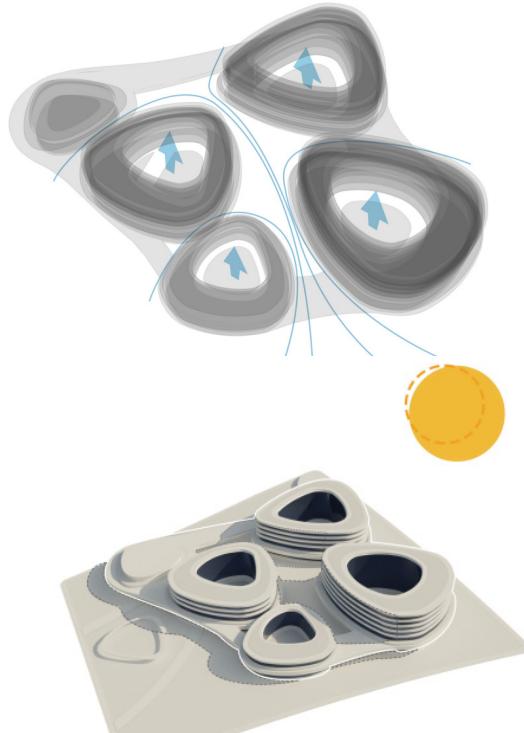
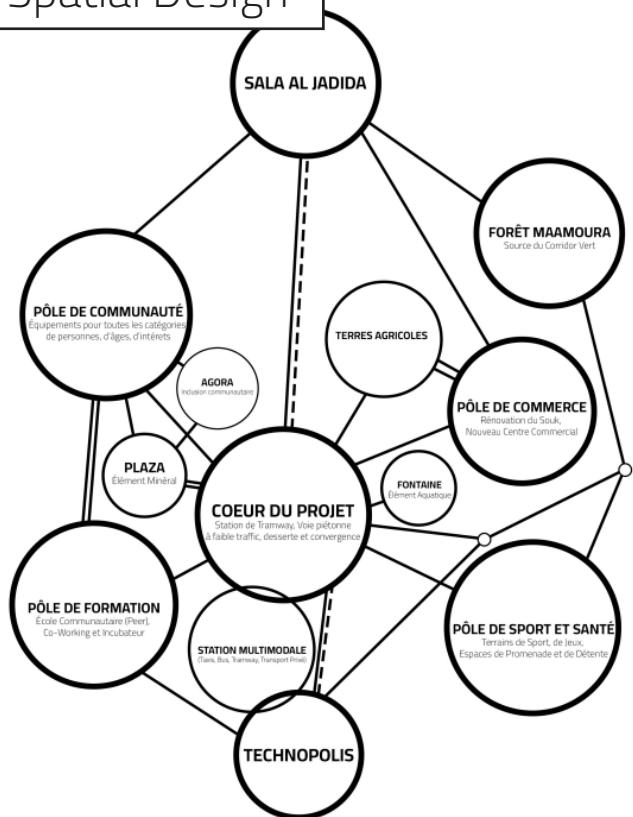
L'analyse des flux de circulation du site conduit à la création de porosités à l'intérieur des bâtiments pour une architecture inclusive et extravertie. Les points d'accès sont ensuite identifiés.



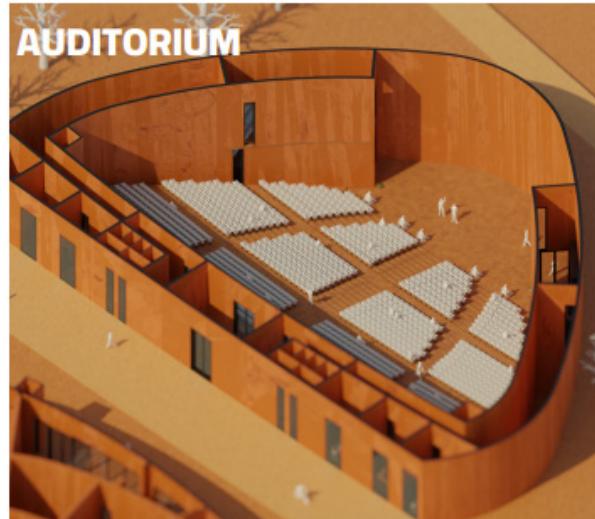
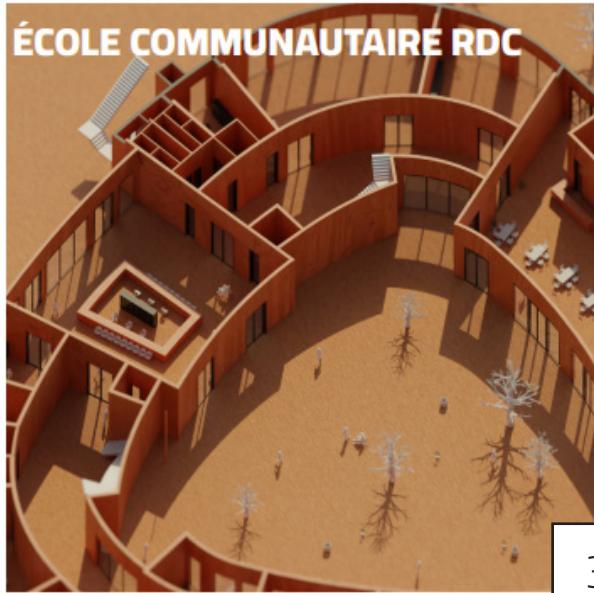
VÉGÉTATION

Des terrasses végétalisées sont ajoutées à chaque niveau pour l'absorption des eaux pluviales et l'irrigation, tout en favorisant l'immersion naturelle.

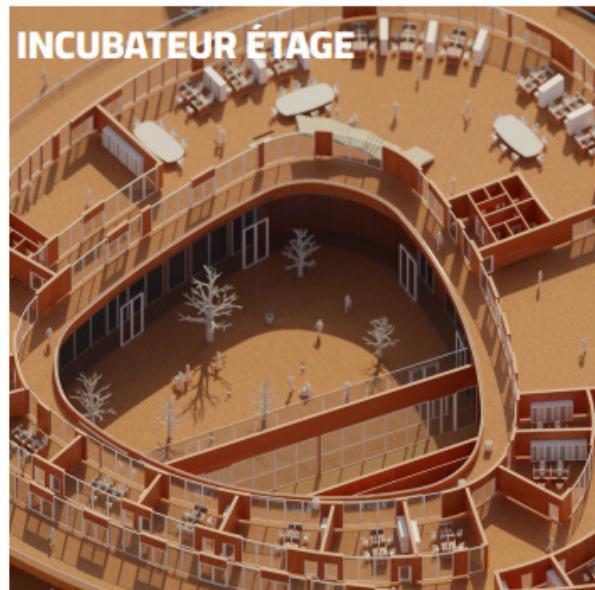
Spatial Design

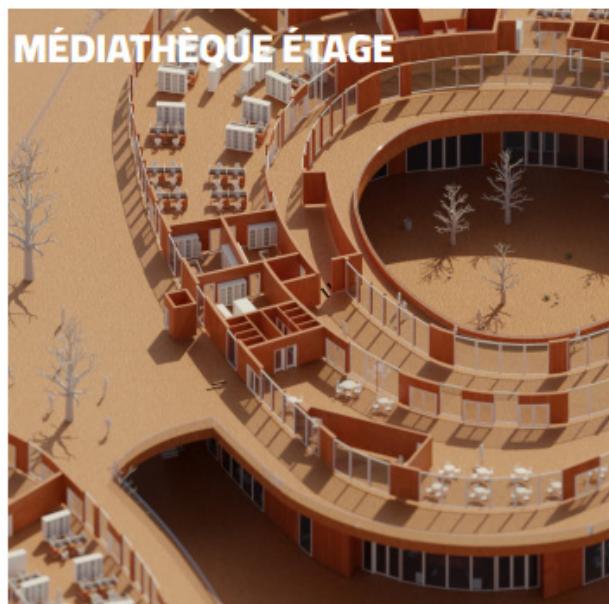
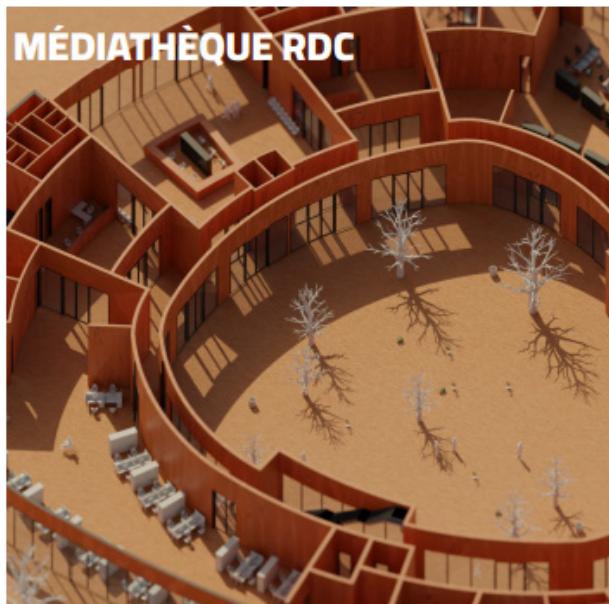
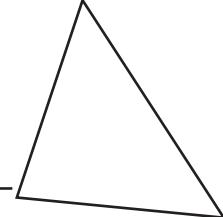


3D Diagrams (Blender)



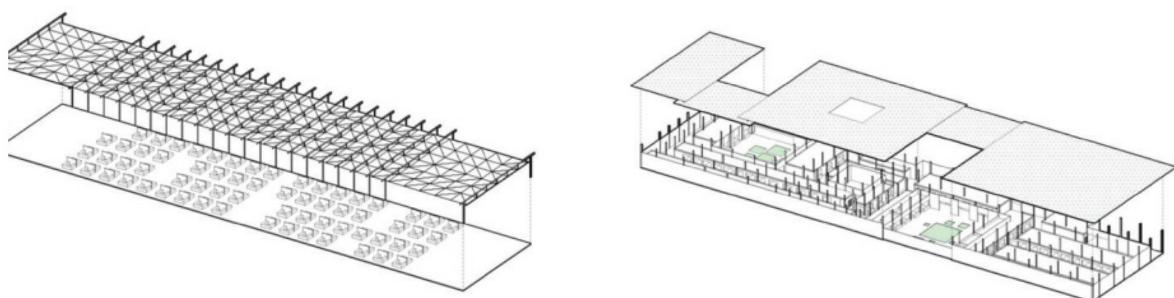
3D Axonometric Views (Blender)

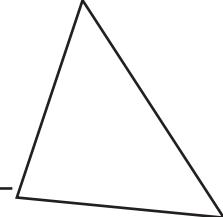






Architecture School
SOUK: A 5TH YEAR PROJECT





Exterior 3D Modeling & Rendering (Blender & Lumion)

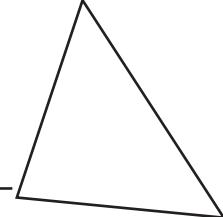




ECO-HOUSING

A 5th Year Project





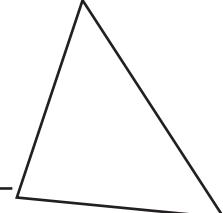
Interior 3D Modeling & Rendering (Blender)



Exterior 3D Modeling & Rendering (Blender & Lumion)

PERSONAL ART PROJECTS





Discovering 3D design in my second year of architecture school ignited a passion that quickly evolved beyond academic requirements. Driven by curiosity, I explored innovative tools and software, ultimately finding my creative home in Blender. What began as a hobby soon turned into a freelance career as I honed my skills in 3D modeling and rendering.

My portfolio spans a diverse range of projects, extending beyond architectural visualization. I've delved into intricate character and environment designs, fantasy, surrealistic, industrial and game design and specialized in creating captivating nature scenes with 3D renders and animations which became a particular forte, allowing me to bring static designs to life with movement and storytelling.

This expertise has led to collaborations with clients worldwide, each project presenting unique challenges and opportunities to push the boundaries of 3D art. From concept to final render, I strive to create immersive visual experiences that captivate and inspire, blending technical proficiency with artistic vision.



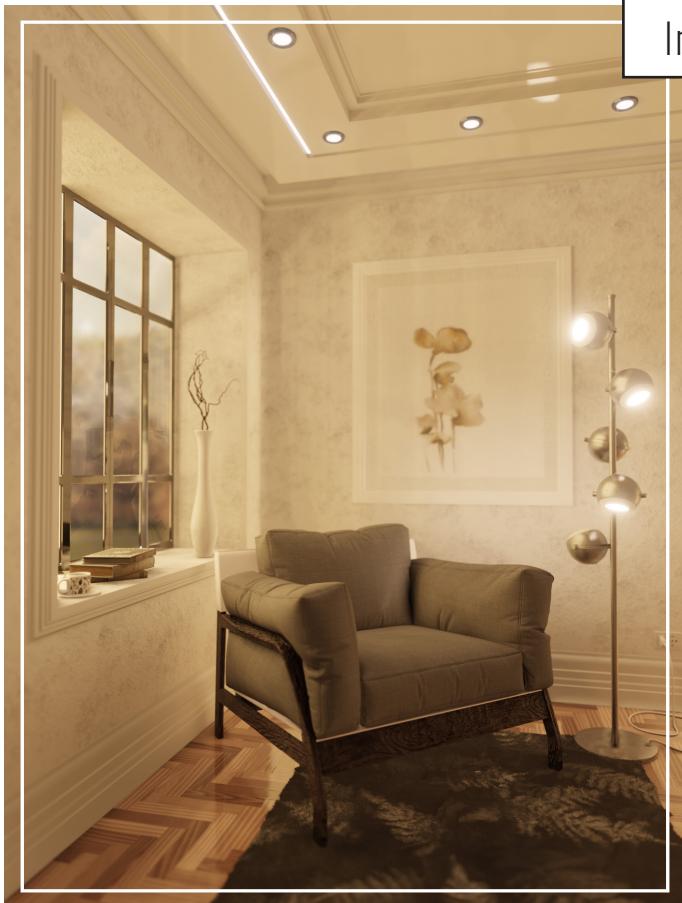
View more Projects on Artstation

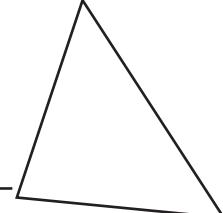
A detailed 3D rendering of a forest scene. In the foreground, large green leaves with small brown spots are visible. Below them, a variety of plants and flowers grow in a lush garden setting. The background features a dense thicket of trees and bushes, with sunlight filtering through the canopy.

3D Rendering & Animation (Blender & Lumion)



Interior Design Projects (Blender)



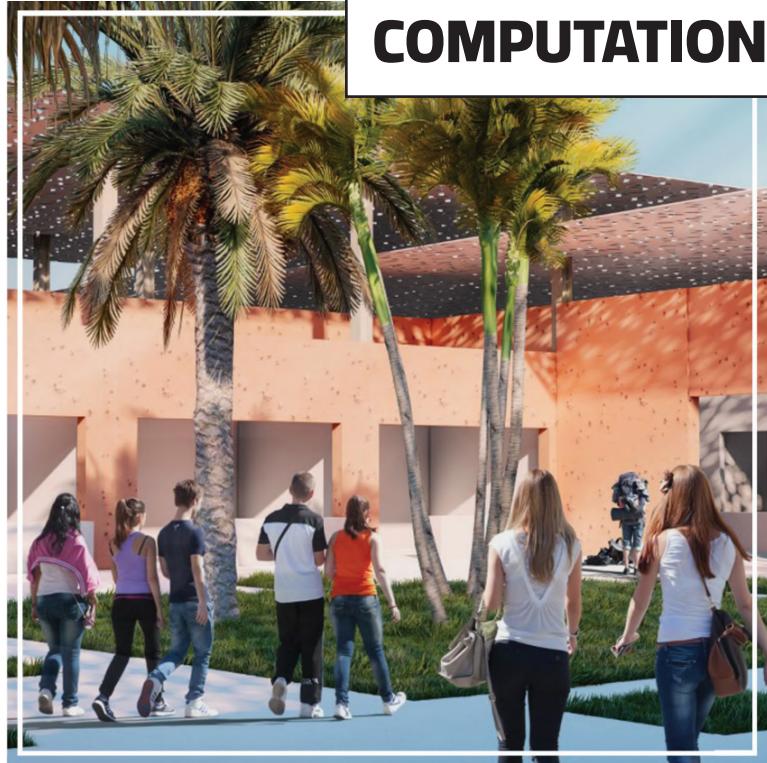


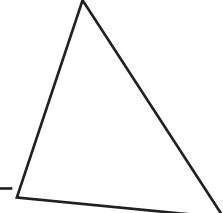
Exterior Rendering (Blender)



3D Axonometry (Blender)

COMPUTATIONAL DESIGN





As an architect and design technology enthusiast, I'm deeply committed to the transformative potential of computational design in shaping the future of architecture. This approach allows us to abstract complex spatial design decisions into geometric functions and mathematical formulas, opening up new realms of creative possibility and efficiency.

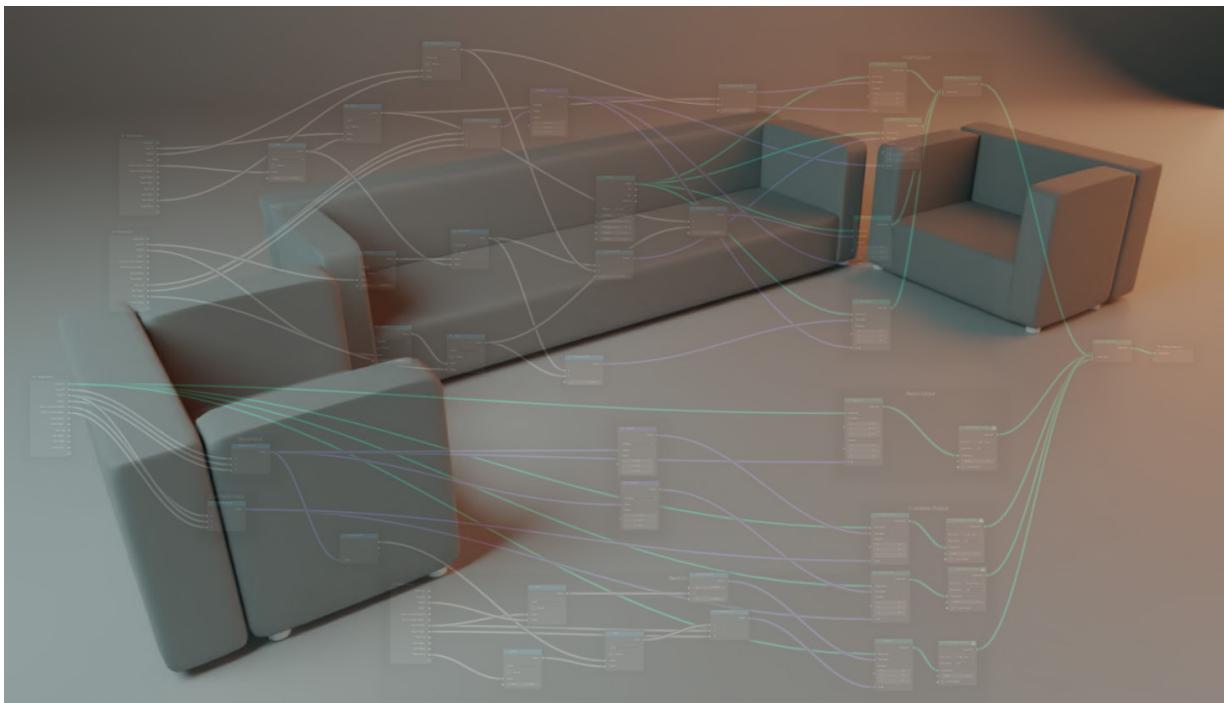
Computational design centers on proceduralism, generative design, and parametric modeling. These approaches enable rule-based design systems, algorithm-driven solution generation, and dynamic, parameter-controlled modeling respectively. Together, they offer unprecedented flexibility and efficiency in architectural design.

These non-destructive workflows dramatically accelerate the design iteration process, enabling designers to generate unique, coherent, and precise designs that often surpass what's achievable through manual methods alone. The ability to quickly explore multiple design options and fine-tune parameters in real-time has revolutionized how we approach architectural challenges.

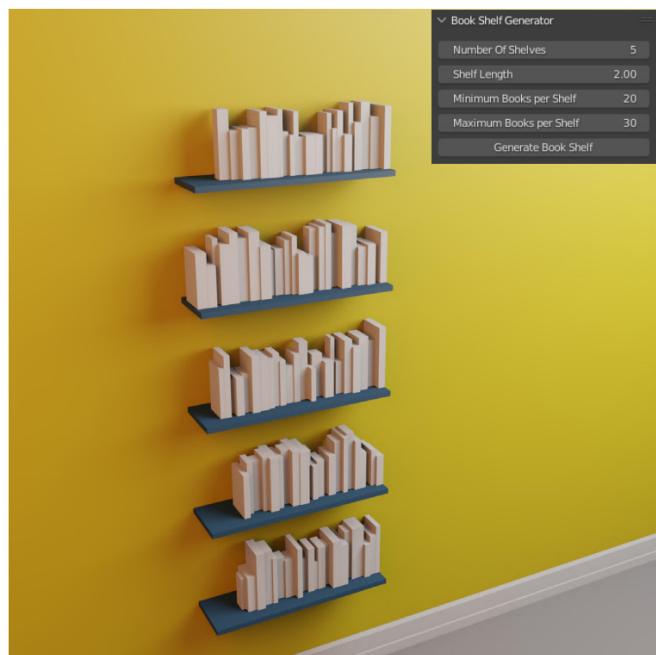
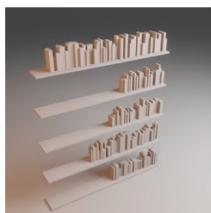
In my professional journey, I've leveraged tools like Rhino Grasshopper and Blender Geometry Nodes to create parametric 3D architectural elements. These solutions empower my clients with the flexibility to explore diverse design options, customize elements to specific requirements, and visualize changes instantaneously. This approach not only enhances creativity but also improves communication and decision-making throughout the design process.



PROCEDURAL FURNITURE

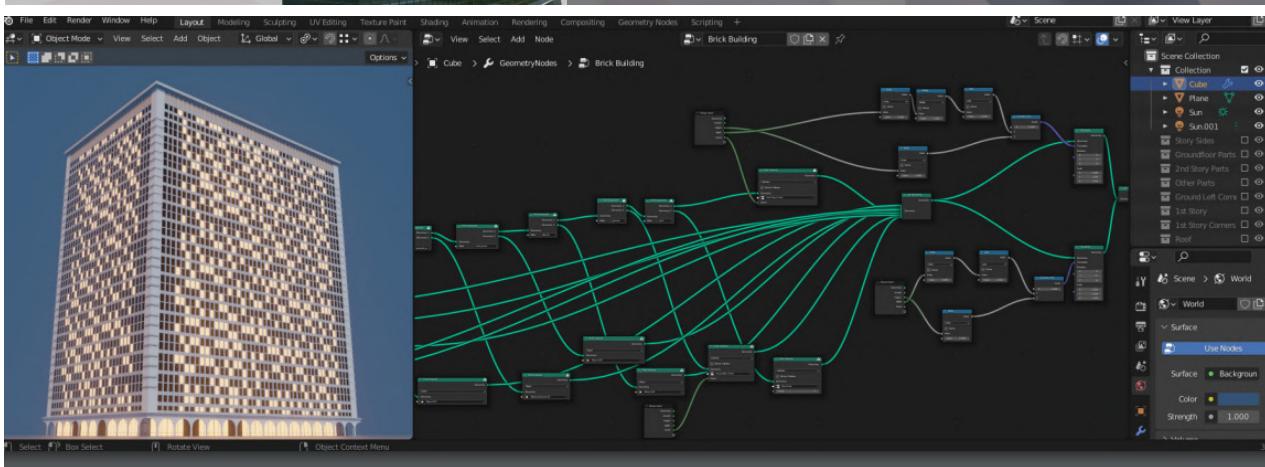
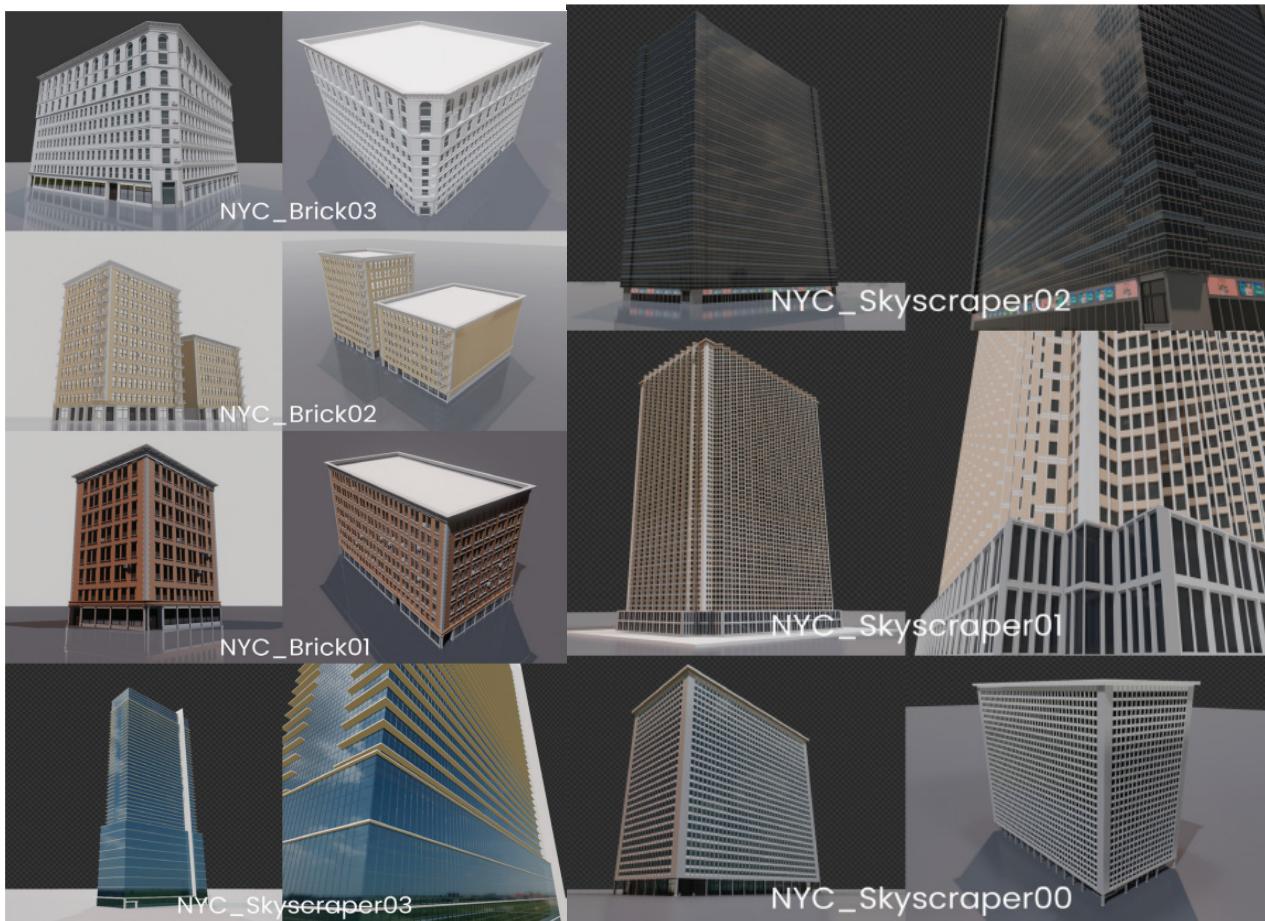


Procedural assets crafted with Blender & Geometry Nodes, enabling rapid generation of customizable buildings and furniture. These dynamic models allow for instant dimension adjustments, streamlining the creation of diverse architectural elements and interior objects.





PROCEDURAL NYC BUILDINGS

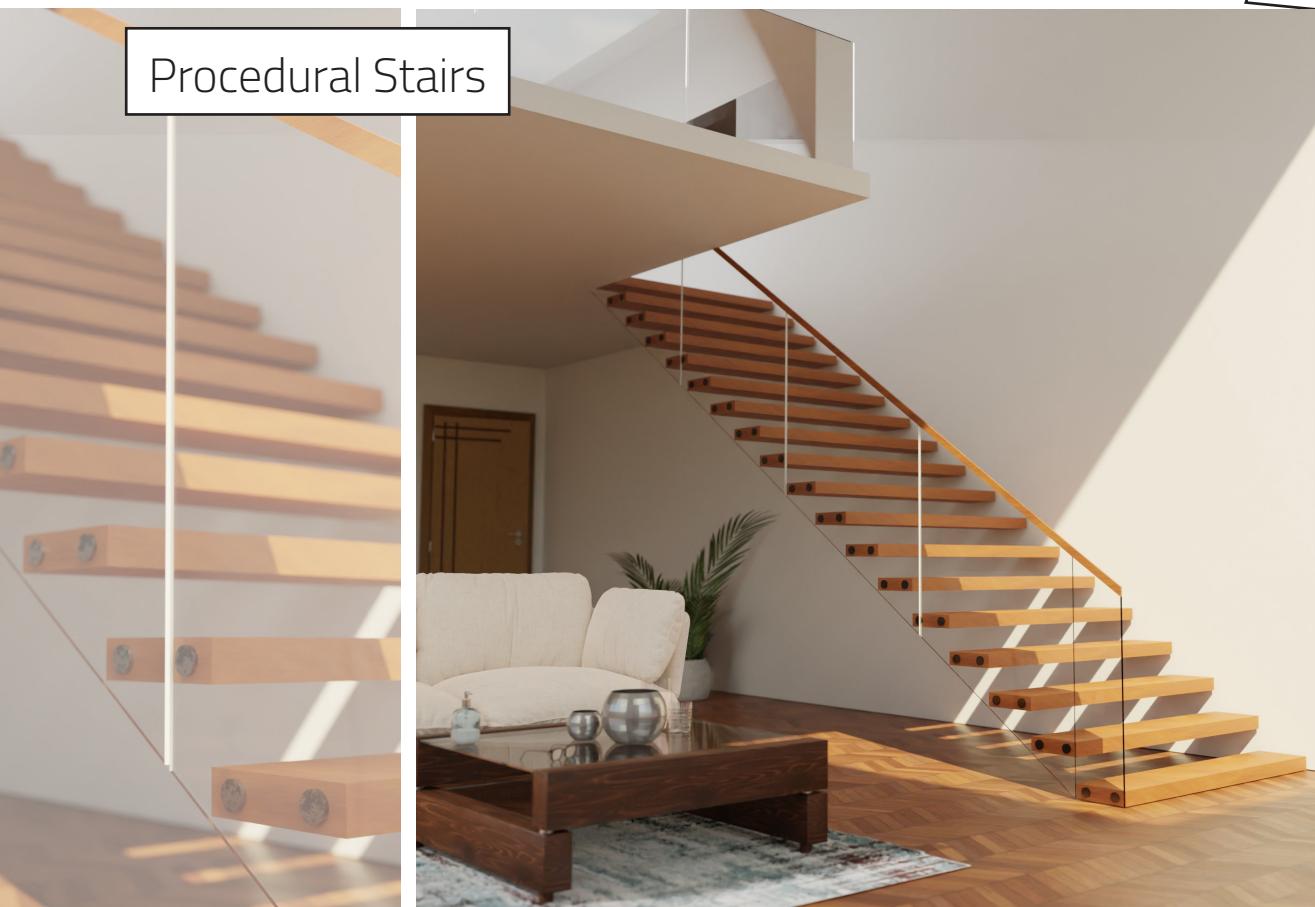


COMPUTATIONAL DESIGN

39

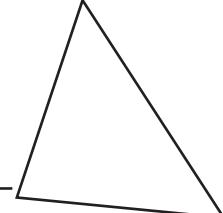
Ezzahir Anass





SOFTWARE DEVELOPMENT





My journey in software development is rooted in a lifelong passion for problem-solving and creation. From childhood block-building and puzzles to simulation games, this inclination naturally evolved into a fascination with coding and automation. What began as a basic introduction to HTML and CSS in high school soon blossomed into a self-taught exploration of Python, algorithms, and various computer science concepts.

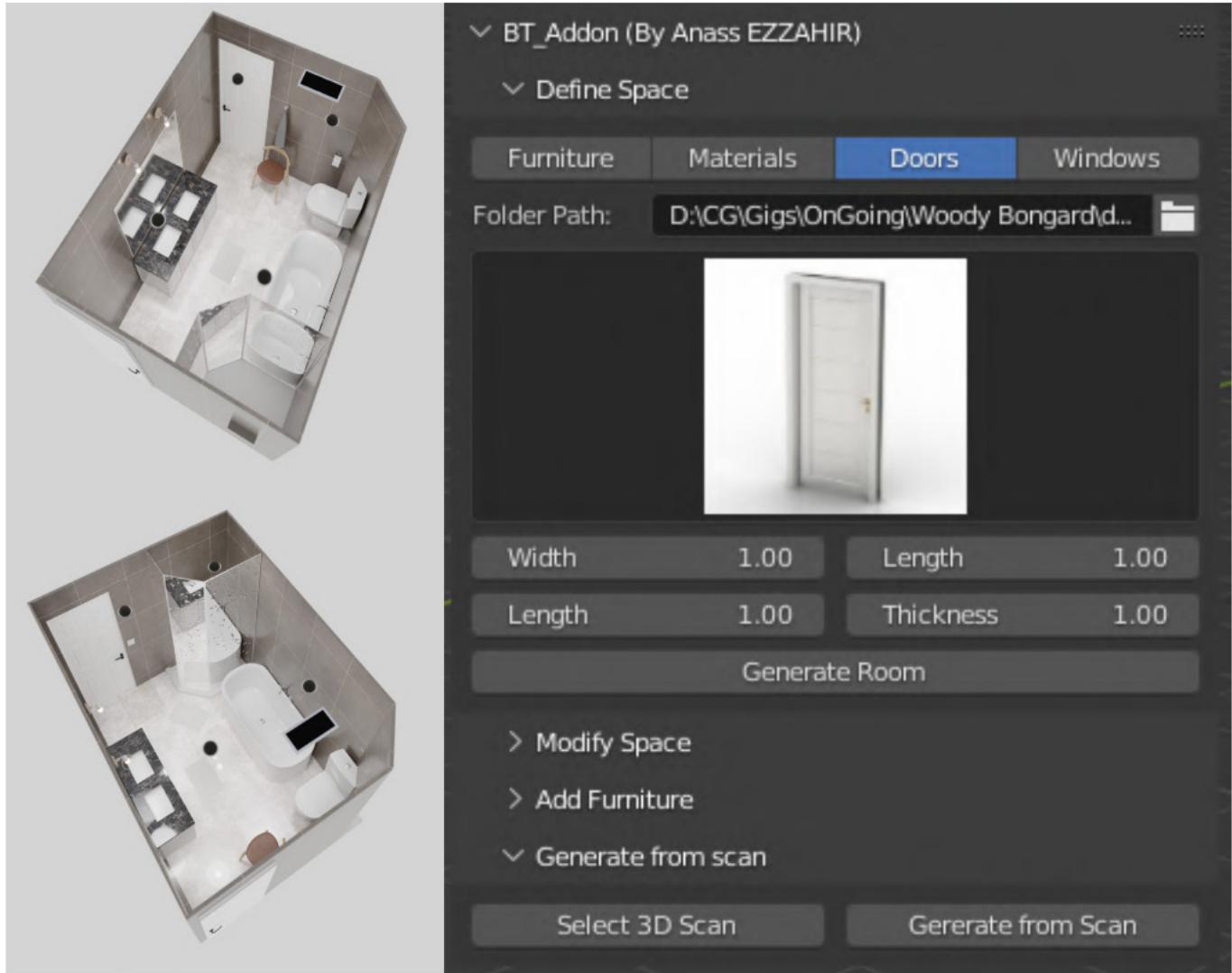
The intersection of my 3D modeling expertise and programming skills led me to automate repetitive workflows in architectural design and visualization. I progressed from simple Blender scripts to developing custom add-ons with user interfaces, streamlining my processes and eventually offering these solutions to clients in the 3D industry.

Each client project presented unique challenges, expanding my knowledge into areas like 3Ds Max and Cinema 4D scripting, web development with ReactJS and TypeScript, and 3D web applications using ThreeJS. Along the way, I gained proficiency in object-oriented programming, version control with Git, API integration, backend development, databases, and cloud computing.

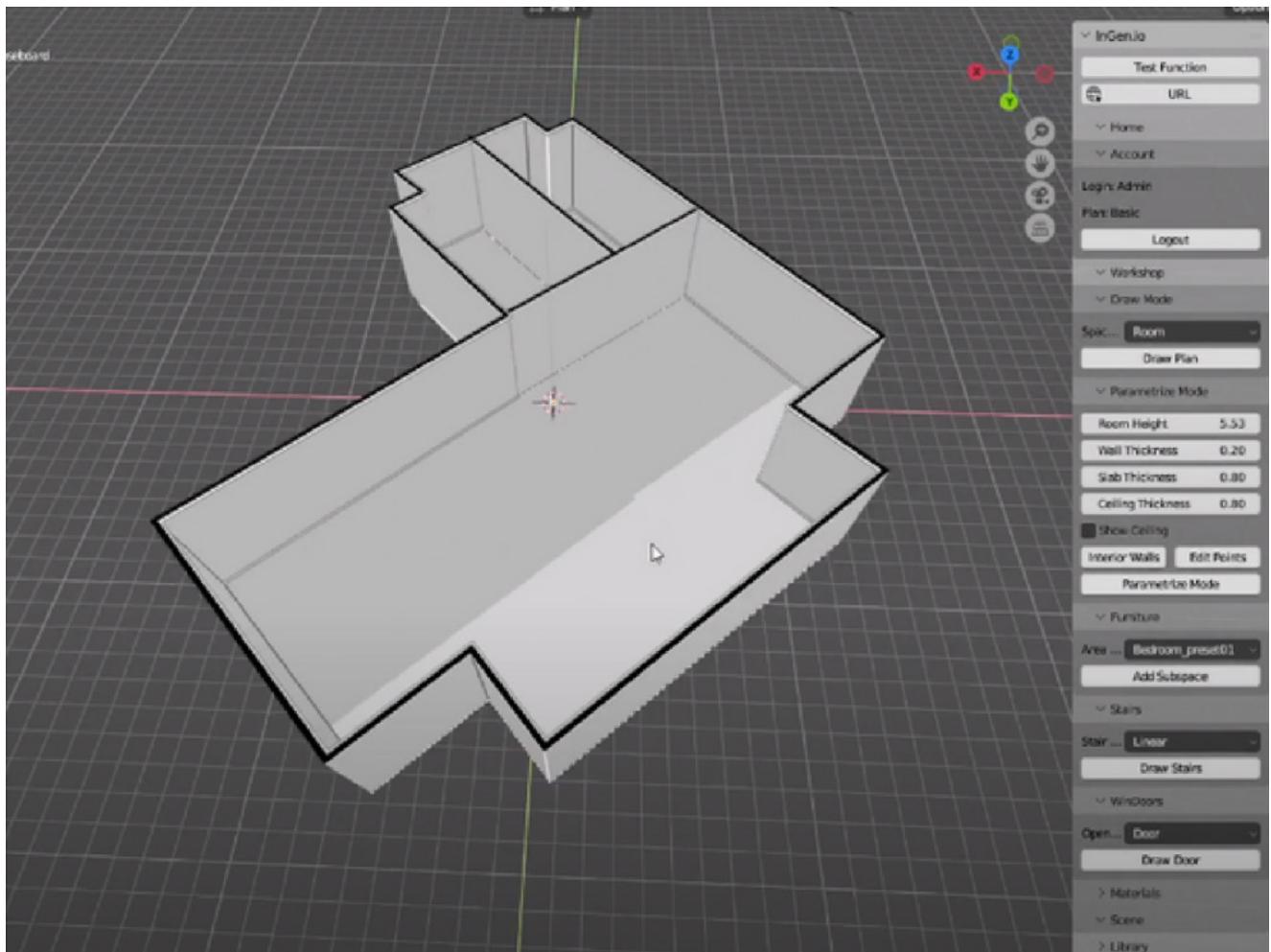
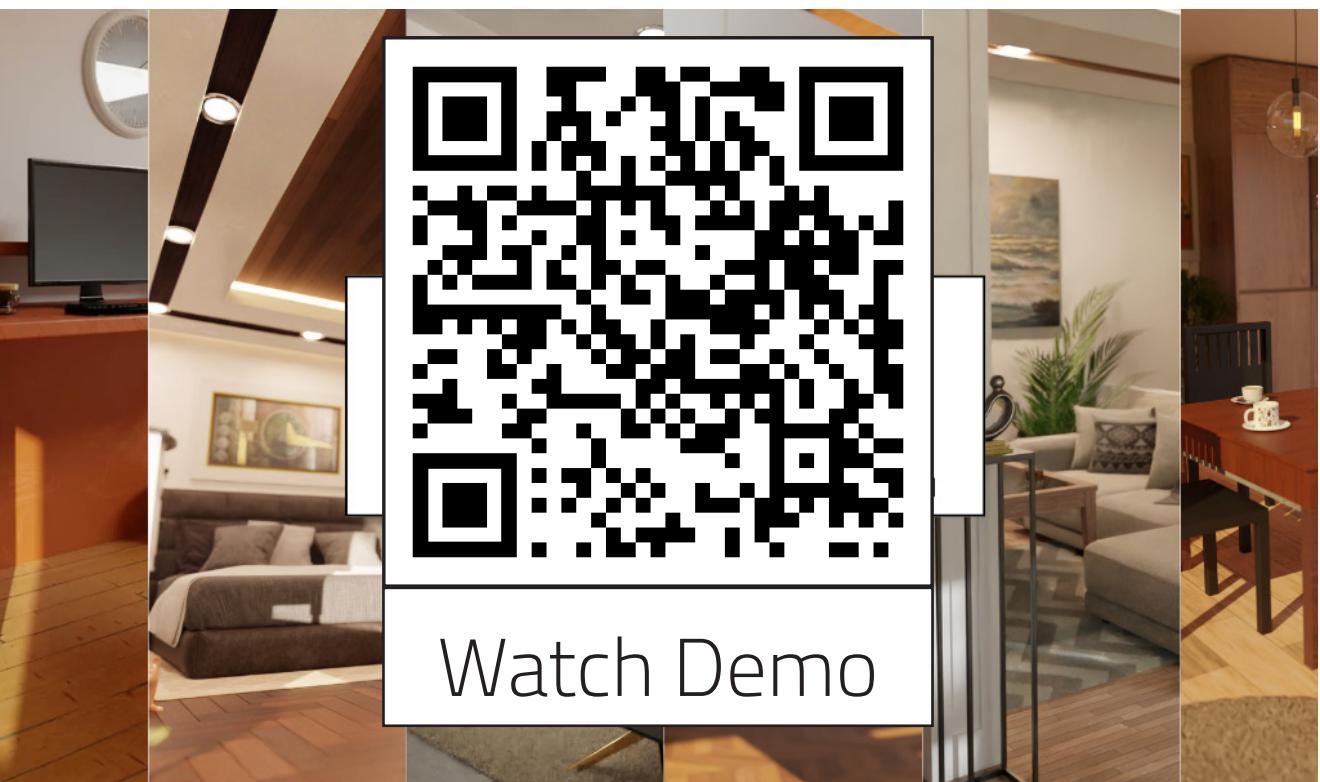
This diverse skill set has enabled me to create and commercialize various 3D-related digital products and solutions, including add-ons and web applications. My software development journey exemplifies the power of combining passion with continuous learning, allowing me to bridge the gap between creative vision and technical implementation in the 3D and architectural realms.

INTERIOR GENERATOR

A BLENDER ADD-ON



The Interior Generator Blender add-on offers a procedural workflow for creating 3D floor plans. It allows users to generate architectural details through a series of prompts and clicks, without requiring coding or visual programming skills. The add-on produces customizable and parametrizable elements, streamlining the process of 3D floor plan creation within Blender.



Parametric Grasshopper Model

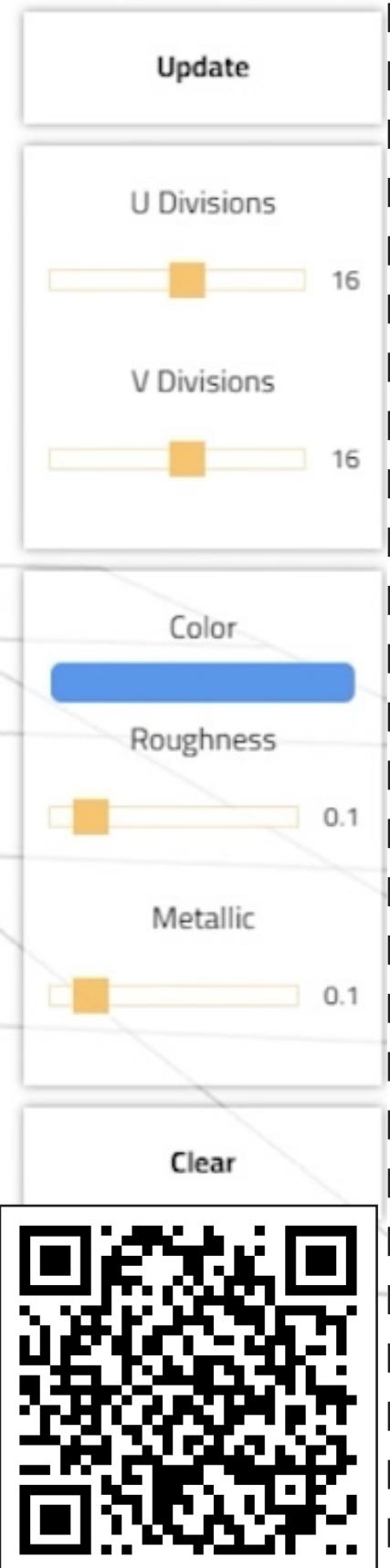
Rendered with ThreeJS

RHINO COMPUTE REACT WEB APP

Edit parameters on the web app to update the parametric 3D lamp Model in real time using Rhino & Grasshopper in the Cloud.

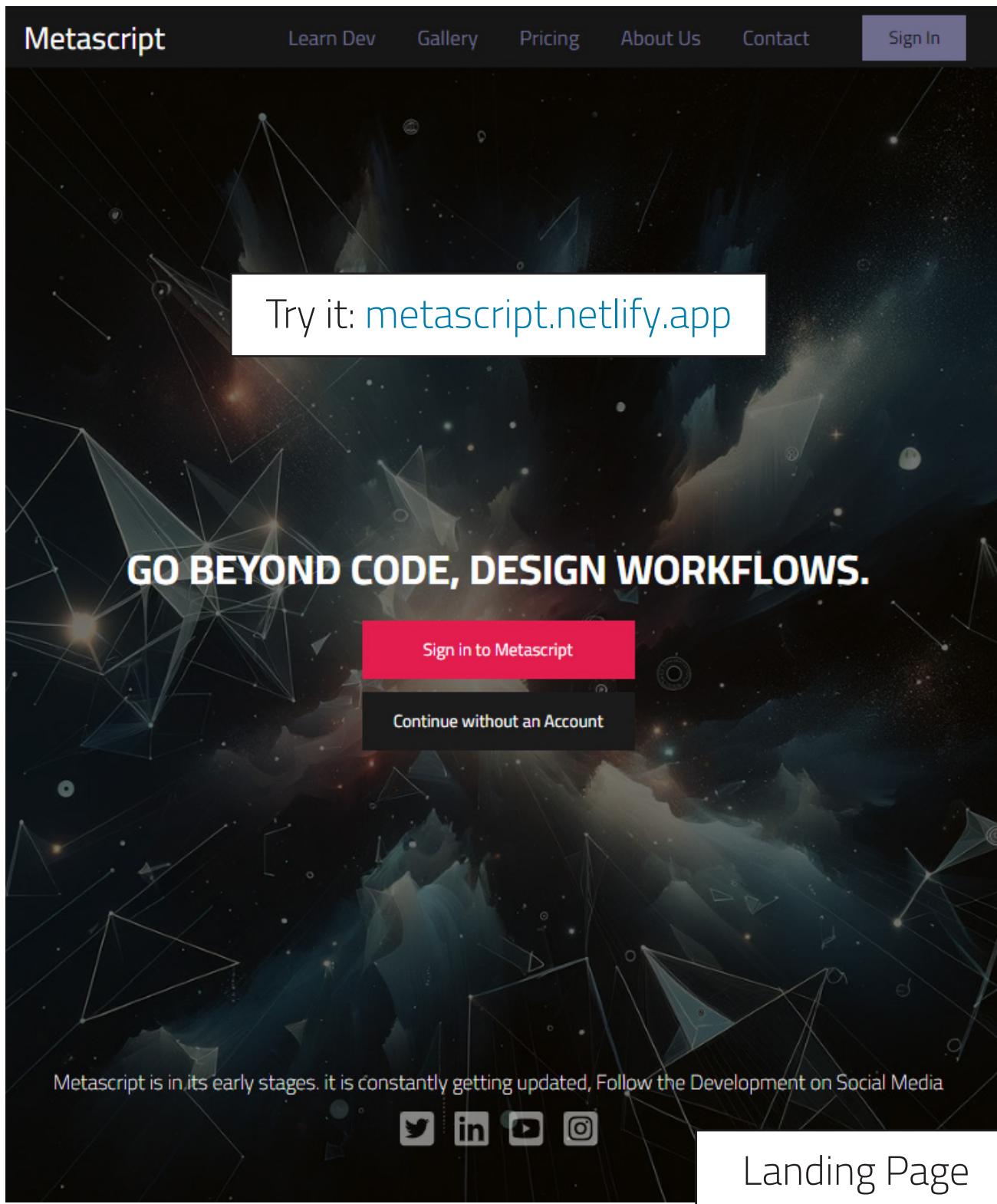
This web app combines ReactJS and TypeScript for the front-end with ThreeJS for 3D rendering. The back-end utilizes Rhino Compute on a .NET framework.

Users interact with a cloud-based Rhino instance, which processes a pre-made Grasshopper definition of a parametric lamp. The app receives user parameters, sends them to the cloud for processing, and returns the customized lamp geometry for real-time visualization in the browser.



Watch Demo

METASCIPT | A REACTJS WEB APP



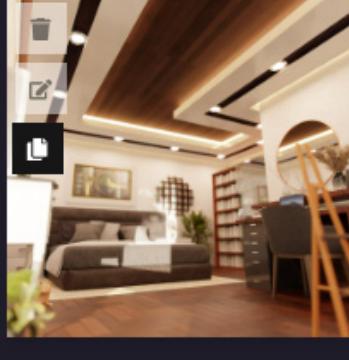
Project Management Page

Logo Metascript (Beta)

Projects Anass Ezzahir



+
Add New Project



Bedroom Generator Addon



Desk Generator Addon



Dining Room Generator



Kitchen Generator



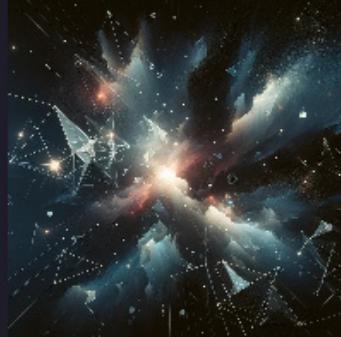
Living Room Generator



Portfolio Maker Addon



Santana Addon



TheIncredible

A dark gray background featuring a complex network of white lines and dots, resembling a molecular or digital grid.

DESIGN TECHNOLOGY PORTFOLIO

EZZAHIR ANASS