

Real Time ArchViz with Unreal Engine 4 (2020)

- Developed a real-time 3D architectural visualization for a contractor using Unreal Engine 4.
- Modeled in Sketchup, textured in Blender and Substance Painter, baked lightmaps, and implemented navigation via Blueprints.
- Created a realistic, interactive demo of the house with high hardware requirements, demonstrating photorealism within engine constraints.
- Delivered a downloadable, high-quality, executable version with real-time lighting and walk-through controls (WASD + mouse).+
- Download the demo: [Download Executable](#)

Waterfront House - Personal Project (2019)

- Designed and modeled a concept house in Sketchup, later refined and rendered photorealistically in Blender.
- Applied procedural materials and HDRI lighting for realistic exterior and interior scenes.
- Integrated custom foliage and architectural assets to produce a detailed, lifelike render of the house concept.

Homing Szeged - Real Estate Agency (2017 – Present)

- Developed the brand identity and all marketing materials for a family-owned real estate business.
- Created a logo reflecting the city of Szeged and its landmarks while incorporating visual elements like keys and target reticles.
- Designed a user-friendly website with a dark theme, matching modern UI trends, and integrated a QR code system into business cards for ease of contact.
- Managed various print materials, forms, and signage to align with the brand's design language.

Star's End - MMORPG (2013 – 2020)

- Led development and design of an ambitious multiplayer online game involving large-scale, space-themed, team-based gameplay.
- Handled all aspects of game logic, engine customization (Unity 3D and Unreal Engine 4), AI design, and shader programming.
- Built over 300 custom icons, volumetric effects, and modular 3D spaceship models.
- Project required self-learning of game mechanics, business modeling, and pipeline creation, including procedural geometry generation and VFX design.