SANGYUL LEE — SENIOR GAME UI/UX DESIGNER · UI · MOTION · VFX / TECHNICAL ART · 10+ YEARS

Game UI/UX, from user flow to shipped, in-engine screen.

Senior UI/UX designer with 10+ years across AAA live-service titles on Unreal Engine — Blade & Soul 2, Lineage W/2M, BnS NEO, Battle Crush (PC · console · mobile). I take a feature from **problem definition and UX flows**, through **Figma wireframes and polished visual design** (Photoshop, Illustrator), all the way to **front-end implementation in-engine** (UMG) and HTML5/CSS. My differentiator is range: a UI/UX designer who **also brings real-time VFX and technical-art depth**. I design the flow, animate the motion, author the shaders & effects, and ship the screen in-engine myself — one designer, the full visual stack.

6	10+	PC·Con·Mob	Flow→Ship
AAA live titles · 5 UI/UX + 1 VFX	years · game UI/UX	multiplatform UI experience	flows → wireframes → in-engine, end to end

See live AAA UI/UX

▶ Playable game demos

VFX · TA →

※ A designer who implements. Live UI motion on this page plays in real time via a flipbook engine I built; the playable games are real front-end builds. Technical-art / VFX depth is shown in the VFX/TA section below — proof I can build what I design.

CORE COMPETENCY

A UI/UX designer who takes it from flow to shipped — and builds it himself

I design the experience, draw the screens, and implement them in-engine. The motion and technical-art craft is what makes the result **feel** right.

UI/UX Design

FLOWS · LAYOUTS · PROTOTYPES

Problem → user flow → wireframe → visual comp → in-engine screen. UX thinking first; the pixels follow the decisions.

- **UX flows, wireframes & prototypes** in **Figma** — information hierarchy, screen states, decision branches
- **Polished visual design** with **Photoshop & Illustrator** — components, icon & color systems, design tokens
- **In-engine front-end implementation** — **Unreal UMG** and **HTML5/CSS** (I ship the screen, not just a mock)
- **Multiplatform** — PC, console (gamepad focus / safe-area) and mobile, on AAA live-service titles

UI Motion Designer

UI MOTION DESIGN

From a single button press to the catharsis of a reward, I direct every motion that happens on the UI.

- **Unreal UMG** live UI — Blade & Soul 2 · BnS NEO · Lineage W/2M · Battle Crush (enhance · menu · scene)
- **UIParticle(uGUI)** — currency fly/collect motion, solving masking/sorting issues
- **DOTween** + **After Effects** motion-graphics; UI-only custom shaders (`Grayscale` , `RGBMask Dissolve`)
- CSS/web HUD motion — HP-bar transitions, level-up card direction (HTML5 games)

UI + VFX + Technical Art — one designer

THE FULL VISUAL STACK

My real differentiator is range — I don't just spec the screen: I **animate the motion, author the shaders & VFX, and build it in-engine**. The rare designer who covers UI, motion and technical art in one pair of hands.

- **In-engine front-end** — Unreal UMG & HTML5/CSS; I hand off a running screen, not a flat
- **VFX & shader authoring** — Niagara/Cascade skill FX, custom UI shaders, Master Material → Instance systems

- **Real-time UI motion** — the polish that makes the interaction feel right (and verifiably so on this page)

LIVE AAA UI — UNREAL ENGINE · UMG

Live AAA UI/UX — shipped, multiplatform, in-engine

All AAA live-service on Unreal Engine. The core is **UMG UI design & direction** — I built the enhance, menu and HUD screens on Blade & Soul 2 · BnS NEO · Lineage W/2M · Battle Crush. **Seven Knights 2 was a VFX (skill-direction) contribution**, included to show real-time combat direction that ties directly to in-match HUD readability. Every capture below is from my own showreels; use the button on each card to watch the full video. **Across these titles the UX craft is the same:** a clear information hierarchy, readability under heavy combat FX, and console gamepad-focus & title-safe layouts on the titles that shipped to console.

★ Featured work — UI direction

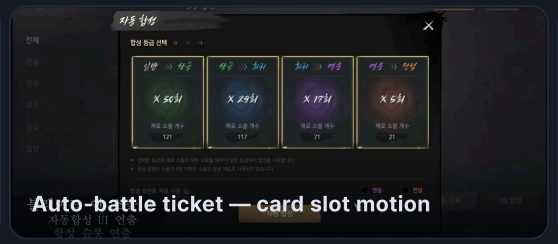
▶ BnS2 UI direction reel

Blade & Soul 2

UNREAL ENGINE · UMG — menus · enhance · season events · scene direction

The UX brief on these screens: make high-stakes economy actions — enhance · fusion · summon — read at a glance. Cost and outcome legible first; the result reveal then carries the emotional payoff. The motion follows that hierarchy, not decoration.

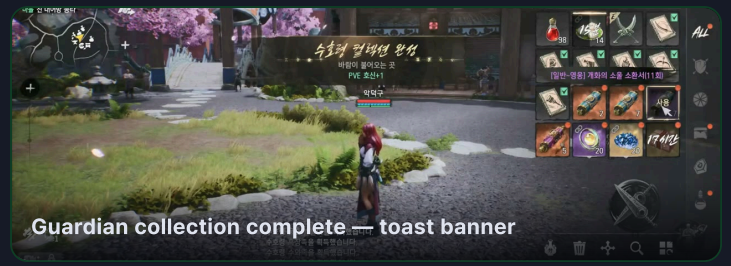

Menu open · attendance slot motion


Auto-battle ticket — card slot motion


Purchase message · reward-claim slot

Live UI direction — real motion loops (key frames in PDF)

Guardian fusion success — result reveal


Guardian collection complete — toast banner


Gear/stat popup — slot-ring expansion


Guardian summon — light pillar & beast reveal


Yaru's Box reforge — golden ring & gem orbit


Enhance success — ink stroke & rune ring


Multi-enhance — chained impact bursts

Astral Chart — constellation lighting scene


Season event attendance — snow-mountain reveal

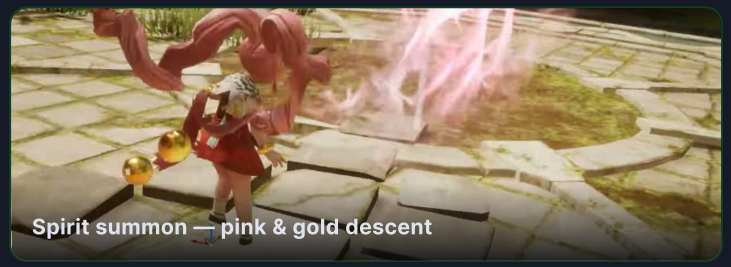
- **An ink-wash motion language** — like the ink swirl on enhance success, UI entrances read as a 'brush stroke' rather than a 'placement'
- **Weight at the moment of confirmation** — restrained everyday interactions, full-screen direction reserved for decisive moments like an enhance success
- **Scene direction** — turning system screens like the Astral Chart and Yaru's Box into scenes of the world

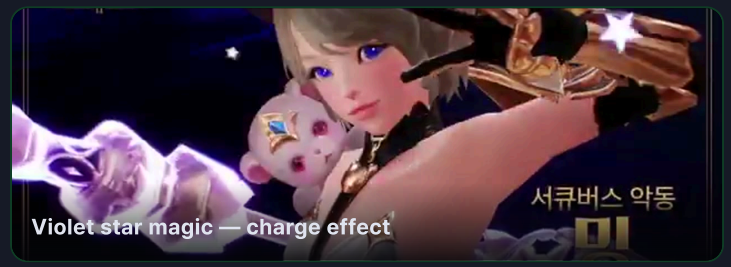
Seven Knights 2 · VFX contribution

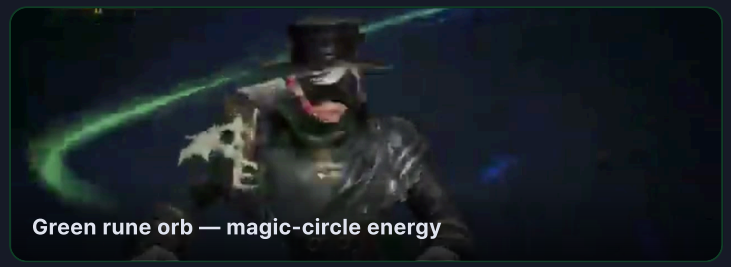
▶ Skill FX reel ▶ UI direction reel

UNREAL ENGINE · skill direction · Sequencer cinematics — real-time combat direction tied to in-match HUD readability

Live skill FX — real motion loops (key frames in PDF)





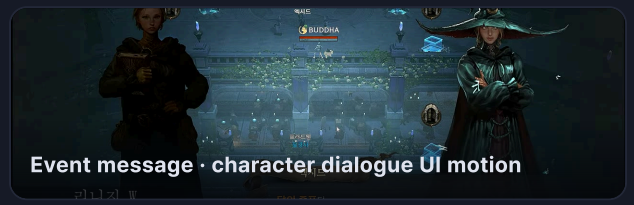


In-game — HUD UI direction · in-combat skill FX (readability in chaos)

- **Three-act ultimate design** — cast (anticipation) → impact (burst) → afterglow. Timing follows the rule that a shorter impact hits harder
- **Collaboration with Sequencer cut-ins** — cut-in FOV shifts & blur reinforce effect density, raising perceived power without adding particles
- **Per-element motion language** — separate build-up curves and afterglow tones per element (fire/holy/dark) to reinforce character identity

Lineage W

UNREAL ENGINE · UMG — gear window · event messages · dialogue UI



- **Weight born from restraint** — minimal metallic motion over a dark tone, keeping focus steady even at high information density

▶ Watch in reel

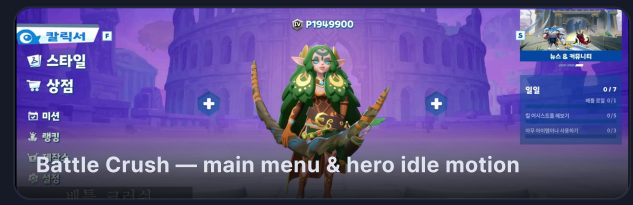
Lineage 2M

UNREAL ENGINE · UMG — enhance · HUD · gacha · collection

▶ Watch in reel

BnS NEO · Battle Crush

UNREAL ENGINE · UMG — inventory · stat slots · main menu · tutorial



- **A spectrum of tones** — from dark MMO tones to pop casual, switching the motion language to fit each IP

▶ Watch in reel

PROJECT 01

Blood Invasion

Role — VFX systems · UI particle motion · custom shaders · TA across the board | Unity 6 · URP 17 | 2D tower defense · mobile

A vampire-themed mobile tower defense. **Varying a single "blood" theme across 122 VFX prefabs and 60+ shader graphs** without losing readability was the challenge. Hit effects for 9 enemy types (assassin, hunter, lancer, priest, witch, etc.) were systematized by an element system, and the core reward loop (collect blood orb → upgrade altar) was directed by **connecting world → UI seamlessly with UIParticle**.

🩸 Element-based VFX architecture

`VFX.Hit.*` 50+ variants run per enemy type while materials/textures combine from a shared pool. Status effects (burn/freeze/shock) are split into `VFX.Status*` families so they can stack visually.

🌀 8 custom URP shaders

`RadialShockwave` (shockwave distortion), `VerticalPannerWithSideFade` (blood pillar), `URPStylizedLava`, and UI-side `RGBMask Dissolve` — what shader graph can't do is written directly in HLSL.

✨ UIParticle reward motion — operating 366 UI prefabs

mob-sakai `ParticleEffectForUGUI` based. `Shared/Prefabs/UI` 366 prefabs (buttons, gauges, badges, currency motion) run under one system; I solved Canvas sorting/masking conflicts in the currency-fly motion and synced a gauge punch-scale to the collect timing.

RadialShockwave.shader — polar-coordinate shockwave ring (URP HLSL, hand-written)

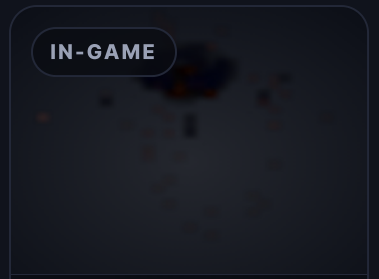
```
// Use particle vertex-color alpha as "time" → drive ring expansion
// from Color-over-Lifetime alone, with no material duplication
float waveRadius = input.color.a;

// Polar sampling: distort radius per angle to make an "organic" ring
float2 polarUV = float2(dist, normalizedAngle) * _MainTex_ST.xy + _MainTex_ST.zw;
float radiusDistortion = (tex.r - 0.5) * _Distortion;
float distToWave = abs(dist - (waveRadius + radiusDistortion));

// ring width + front/back edge fade + circular mask
float ringMask = 1.0 - smoothstep(0.0, _Width, distToWave);
float waveMask = ringMask * frontSoftness * backSoftness * circleMask;
```

In-game captures — combat VFX

real in-game effects captured by my own batch recorder



VFX.BloodExplosion

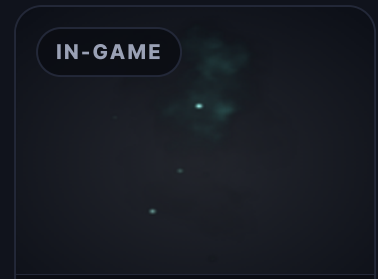
kill motion · 102f capture

VFX.BloodSurge

blood-surge skill · 30f

VFX.Teleport

teleport · 90f



VFX.StatusIce

freeze status · 60f

UI motion — currency collect / feedback loop

UIParticle family playing on a uGUI canvas

UIParticle — UIBall

currency-fly motion · uGUI particle

VFX.GetOrb

orb-collect feedback · 60f

Flipbook texture atlas

the raw material of effects — sheet layouts shown too

Blood_splash_03 — 2048² atlas

Blood_splash_05 — 2048² atlas

Blood_splash_08 — 2048² atlas

PROJECT 02

K2 — Block Puzzle

Role — game-feel FX · UI motion · editor tooling | Unity · mobile puzzle | live-service build

In casual puzzles, effects ARE **game feel**. From the short impact of a single match to the afterglow of reward motions like order-complete and season progress — all designed as **feedback that tells the player "your finger was right"**. Alongside the motion work, I owned the editor tooling that sped up art/design iteration.

Timing IS the design

A three-layer tempo: impact (~0.1s) → reward (0.3–0.4s) → mood loop (2s). Fast feedback short and strong, rewards with afterglow.

Editor tooling environment

`FlyEffectTestMenu` (instant motion testing), `TMPFontResamplerWindow` (font resampling), `StageEditor` (level editing), `AutoPlayEditor` (autoplay verification) — tools that raise art/design iteration speed.

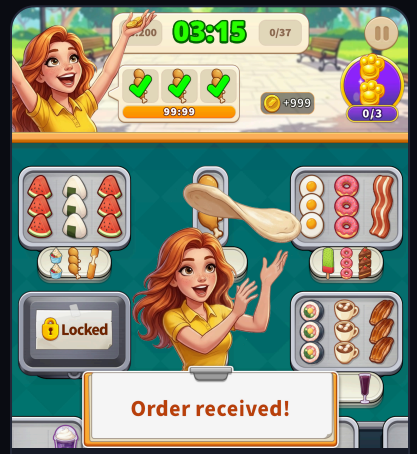
Motion shipped in the live build

Season-progress HUD in the food-truck lobby, order-take/clear feedback on the order board — motion is **verified in the live build**, not a mockup.

Live build — in-game

Unity production-build screenshots

Lobby — food-truck theme · season-progress HUD



In-game — order board · clear-feedback motion

PROJECT 03

WoolSaga

Solo project — design · art direction · shaders · VFX · UI (all of it)

Unity 6 + PixiJS 8 dual build

A casual puzzle starring a yarn dragon. The same game was **built two ways — Unity (native) and PixiJS (web)** — and keeping the same visual identity across platforms was the core challenge. The Unity side got a custom shader for wool texture; the web side got 44-frame flipbook VFX.

🦙 WoolFluff shader — "wool doesn't work with PBR"

Standard Lit makes wool look like glossy plastic. **Wrapped Lambert** (soft light/shadow boundary) + **Fresnel Rim** (fluff light on the silhouette) + a matte finish express the fiber texture. Full URP support including ShadowCaster/DepthOnly passes.

Runtime particles — ExplosionFX

A two-layer particle (fluff puff + sparks) generated in code without prefabs. Color tint is linked to game logic (yarn color), handling 9 color variants with no extra assets.

🖥️ Code-based HUD builder

`HudController.cs` — HP/yarn gauges, the puzzle grid, and win/lose modals all generated at runtime. Includes state motion like a wildcard pulse ring. A UI workflow with no prefab-merge conflicts.

WoolFluff.shader — core lighting (URP HLSL, hand-written)

```
// Wrapped Lambert — soften the light/shadow boundary, mimic light bleed inside fibers
float wrapped = saturate((NdotL + _Wrap) / (1.0 + _Wrap));

half3 diffuse = baseRGB * mainLight.color * (wrapped * shadow + _AmbientStrength);

// Fresnel rim — bright at the silhouette, falling off inward.
// Tint the rim with base color too, for a "wool holding light" feel.
float fresnel = pow(1.0 - saturate(dot(N, V)), _RimPower);
half3 rim = fresnel * _RimColor.rgb * _RimIntensity * baseRGB;

return half4(diffuse + rim, _BaseColor.a);
```

Flipbook VFX for the web build

Frame sequences played in PixiJS — replayed here by the same engine

WS

Yarn Burst

yarn burst · 44f flipbook

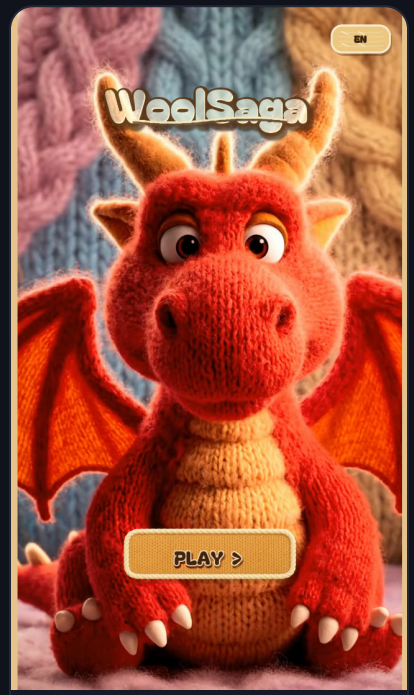
WS

Yarn Poof

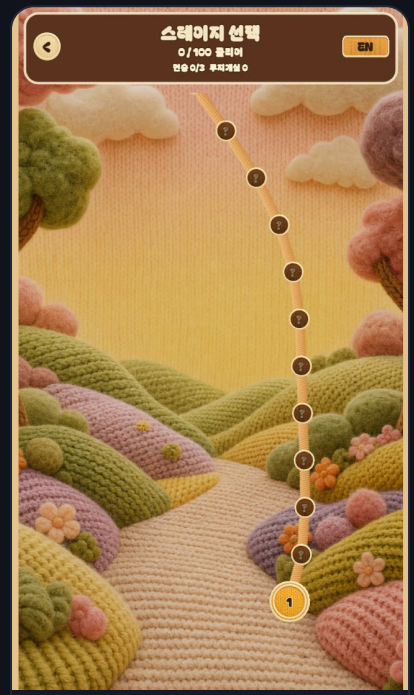
dissipate smoke · 28f flipbook

Real build — in-game

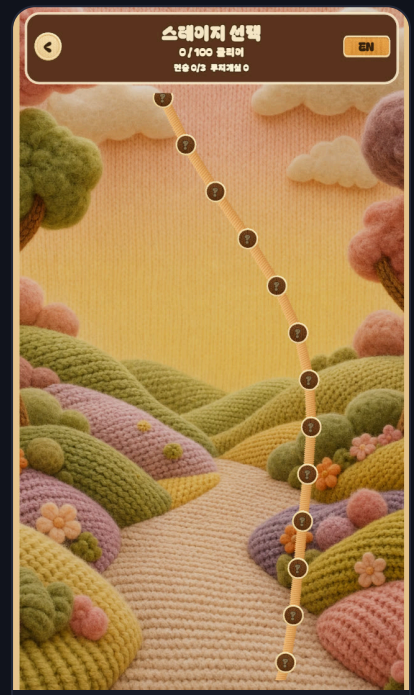
PixiJS web-build screenshots



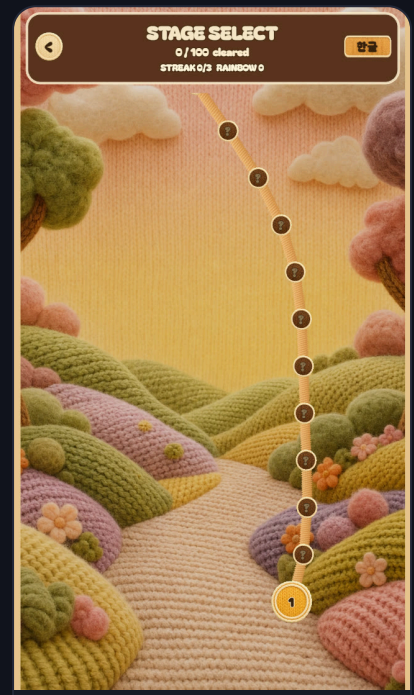
Title screen — wool dragon



Stage select — knit world map



World map — upper stages

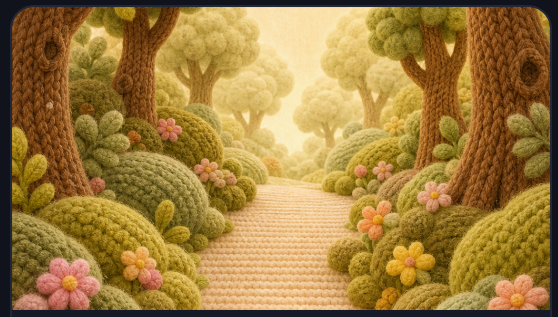


EN localization — language toggle

Art direction

theme backgrounds · characters · title cinematic

In-game background — main



Theme background — Forest

Theme background — Snow

Stage-select map

Dragon head — main character

Cat — sub character

PROJECT 04

Dungeon Survivors

Solo project — HUD motion · combat direction · all systems

Phaser 3 · HTML5

8 characters · 5 zones · full meta loop

A vampire-survivors-like HTML5 game. On a screen flooded with hundreds of enemies, **the UI responds instantly with 0.12s transitions** without obscuring combat. Canvas (combat) and DOM (HUD) are separated so each uses its best tech — HP/XP bars via CSS gradients + transitions, the level-up roulette via DOM overlay, combat effects via Phaser particles.

🎛️ Hybrid rendering strategy

Combat (hundreds of entities) on a Phaser canvas, HUD on DOM. The HP-bar `width .12s` transition, the equipped-artifact `inset glow` glow — whatever CSS does better, goes to CSS.

🎰 Level-up roulette motion

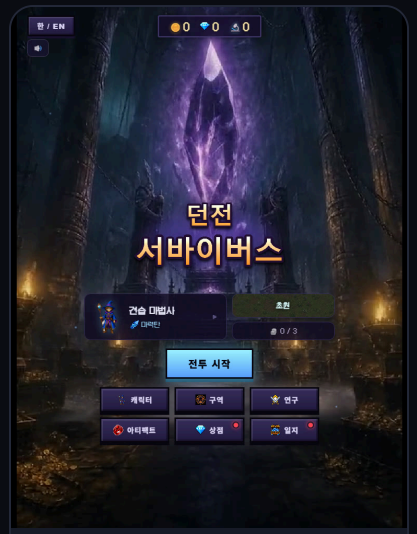
A beat of combat-pause → roulette spin → winning-slot highlight. Reworked from card-pick to roulette to raise anticipation at every level-up, with a tier color system (Common–Legendary) applied consistently across slots, chips, and icons.

🗺️ Scene transitions & information hierarchy

Six hub screens (character/zone/research/shop/journal) under one overlay system — unifying enter/exit motion direction to give a sense of space.

In-game — latest build

dungeon hub · real combat · level-up spin roulette (actual captures)



Dungeon hub — portal motion · 6 meta menus

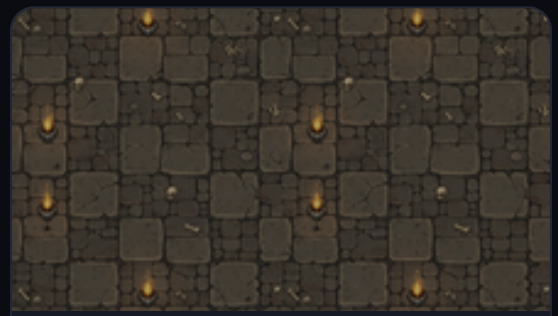
Real combat — enemy waves · hit FX · HUD

Level-up roulette — spin → winning card · reroll (ad/gem)

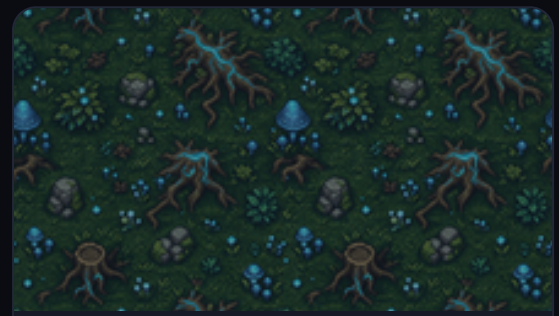
Art assets

zone backgrounds · characters · skill-icon system

Hub (main menu) background



Zone — Laboratory



Zone — Arboretum

Zone — Sewer

Skill-icon system — 8 mage-line skills

4 characters + 4-tier color system

Boss — Goliath

PROJECT 05

Grid Rush — new block puzzle

Even prototypes are managed as **runnable builds**, not design docs. Grid Rush is a block puzzle with 4 modes plus records and a daily meta loop — every capture below is actual gameplay, and **it plays right here**.

Solo project — design · art · motion · code (all of it) | HTML5 · mobile puzzle | Classic · Stage 48 · Time Attack · Daily

🎯 Placement IS the thrill

Instant feedback from piece placement → line clear → combo. The puzzle game-feel honed on K2, extended into my own title.

🧩 4 modes + daily loop

Classic (endless) · Stage 48 · Time Attack (60s) · Daily Challenge. A meta design where BEST records and daily missions drive return visits.

🧨 Item motion

LINE (row clear) · BOMB (area blast) items — board-splitting clear motion and slot-gauge feedback design the feel of a comeback.

In-game actual build captures — main menu · classic mode

Main menu — mode select · daily challenge

Classic — placement · NEXT queue · LINE/BOMB items

▶ **Play Grid Rush** (open via START_PORTFOLIO.bat / hosted URL)

PLAYABLE

Play, don’t tell — live demos

The games below ship as **actual builds** in this portfolio folder. **Dungeon Survivors · Grid Rush** play instantly by double-clicking `index.html`, and **WoolSaga** dynamically loads assets, so run it via `START_PORTFOLIO.bat` (local server) or a hosted URL.

WoolSaga

PixiJS 8 web build. A yarn-dragon puzzle — 100-stage map, flipbook VFX, UI motion. (play via server/host — `START_PORTFOLIO.bat`)

▶ **Play** (open via START_PORTFOLIO.bat / hosted URL)

Dungeon Survivors — VSLike

A full Phaser 3 game (8 characters · 5 zones · meta progression). Verify the dungeon-hub motion, level-up spin roulette, and hybrid HUD by playing.

▶ **Play** (open via START_PORTFOLIO.bat / hosted URL)

Grid Rush — block puzzle

HTML5 web build. A block puzzle with 4 modes · NEXT queue · LINE/BOMB items · daily meta loop — plays right here.

▶ **Play** (open via START_PORTFOLIO.bat / hosted URL)

This is the other half of how I work — the VFX & technical-art depth under the UI/UX above. Designing the screen *and* building the effects, shaders and tooling behind it, in one pair of hands, is exactly my differentiator.

UI + VFX + TECHNICAL ART

The other half — VFX & technical-art depth, in one designer

Alongside the effect/UI work on those live titles, I built **a pipeline that captures & classifies in-game effects automatically**. It auto-captures **3,815 effects** and auto-classifies **3,087 of them into 13 categories** into a searchable/playable/exportable library (VFX Library v3) — **see the real screens below**. A system that answers "how did this effect look in another game?" within 3 seconds.

STEP 1 — CAPTURE

VfxBatchRecorder.cs

Resident Unity Editor recorder. `_VfxBatchTrigger.json` detected → spawn, play & frame-capture VFX prefabs. Resolution/FPS/length configurable.

STEP 2 — EXTRACT

vfx-sprite-extractor

TypeScript CLI. Unity YAML/.meta parsing → GUID map → texture tracing. UE5 projects supported too.

STEP 3 — PROCESS

Auto-Trim + Sheet Export

Auto-trim transparent padding → auto-compute N×N grid → export sheet (original + 50%). Sharp-based image processing.

STEP 4 — SERVE

VFX Library v1→v3

3,815 captured → 3,087 classified. Search/play/export web viewer, self-improved over 3 iterations.

📐 Why I built it

Hunting for effect references ate 30% of work time. Effects scattered across games are **captured once and reused forever** — building a moodboard for a new project dropped from days to minutes.

🔁 v1 → v3, 96.5% lighter

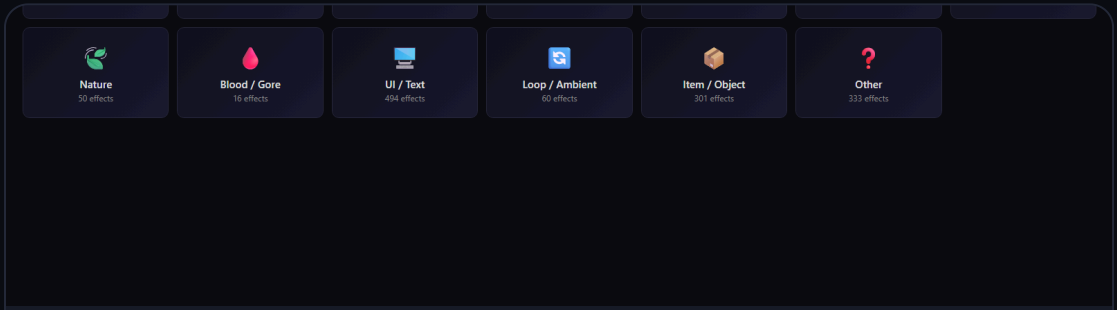
v1 (5.3GB static HTML) was heavy; v2 (metadata + server) gained manageability but was slow. v3 split thumbnails and lazy-loaded to shrink the core to **184MB**. I iterate on tools like products too.

🧪 This portfolio is an output too

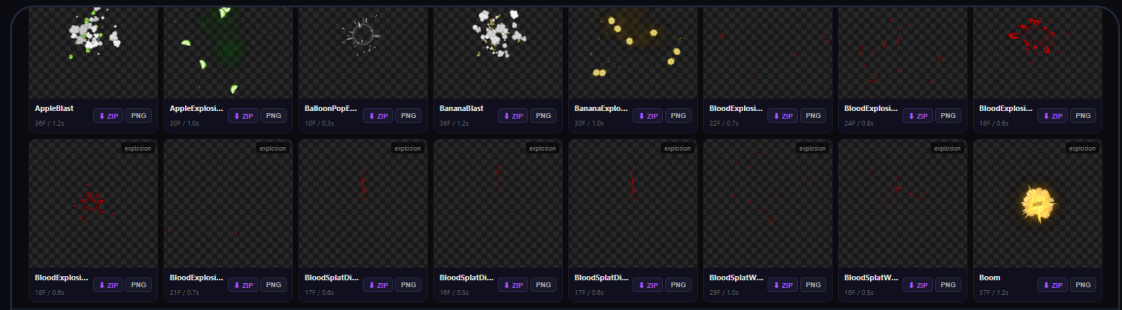
The flipbook player, sequence playback, and viewport-based playback control on this very page are all **a custom engine** written with the same pipeline philosophy.

VFX Sprite Library v3 — real screens

an effect-reference tool I designed & built · live demo included



13 categories · 3,087 effects auto-classified — search · batch play · one-click export



Explosion category, 608 effects — "Play All" runs 60 at once, alpha-background toggle, one-click ZIP/PNG export

_VfxBatchTrigger.json — capture spec for artists

```
// Artists only write the prefab path into JSON.
// The resident editor recorder detects it and captures automatically.
{
  "prefabs": ["Assets/ ... /VFX.BloodSurge.prefab"],
  "width": 512, "height": 512,
  "fps": 30, "duration": 5.0,
  "background": "transparent"
}
```

VfxBatchRecorder.cs — frame capture loop (excerpt)

```
for (int f = 0; f < frameCount; f++)
{
    yield return new WaitForEndOfFrame();

    RenderTexture.active = rt;
    GL.Clear(true, true, new Color(0,0,0,0)); // preserve alpha
    cam.Render();
    readTex.ReadPixels(new Rect(0, 0, w, h), 0, 0);

    File.WriteAllBytes(
        Path.Combine(dir, $"frame_{f:D4}.png"),
        readTex.EncodeToPNG());
}
```

SANGYUL LEE — Senior Game UI/UX Designer · Multiplatform · In-Engine

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UX: Figma · user flows · wireframes · prototypes · **Visual:** Photoshop · Illustrator · After Effects · **Front-end / engine:** Unreal UMG · HTML5/CSS · Unity (URP/HLSL) · **Motion/VFX:** DOTween · Niagara · Cascade · Sequencer · 3ds Max

A designer who implements: live UI motion plays in real time via a flipbook engine I built, and the playable demos are real front-end builds.
This page is print-optimized — press Ctrl+P to export a landscape PDF directly. Front-end runtime UI in UMG and HTML5/CSS; comfortable moving to declarative UI paradigms such as XAML.