

Be Inspired. Be Creative. Be NEXT.

Ubisoft Toronto NEXT is an annual competition designed to showcase the talent of video game development students in Ontario. Kick-start your career in the industry with a paid internship and learn from Ubisoft Toronto's top talent.

Compete in one of seven disciplines to win an internship:

- 3D Art (Modelling)
- Concept Art
- Technical Art
- Animation
- Game Design
- Level Design
- Programming

Eligibility

The competition is open to applicants who:

- Are legally entitled to work in Canada;
- Reside in Ontario;
- Are currently attending OR have graduated from an Ontario post-secondary school no earlier than Spring 2022;
- Have less than 2 years of professional experience in the game development industry;
- Are not a current or former employee of any Ubisoft studio;
- Complete the challenge individually. Team-based submissions will not be reviewed.

Questions?

Email us at NEXT@Ubisoft.com. Note: Email is not monitored 24/7 but we will do our best to respond within 48 hours.

Ubisoft Toronto NEXT: Technical Art Challenge

Technical Art is a unique melding of art and technical knowledge.

This challenge is about creating a technical interpretation of an artistic challenge. We are looking for ingenuity & understanding of what you did, why you did so, how did you reach that conclusion and how it works.

As a technical artist on our open world game, one of your responsibilities is to ensure that the production of the game is achievable. You do this by providing advice to our creative directors and producing both artistic and technical solutions.

Technical Art Brief

Spaceship from earth in 2077 has landed on Venus. They had a bumpy ride to Venus, but they were greeted by a friendly species on Venus who started helping them redesign their recreation room on the spaceship. Except, the humans and aliens had a lot of conflict on the design decisions, and this led to more damage than redesigning.

- Create a full 360-degree scene or a partial cutaway but ensure the footprint does not exceed 6m x 6m.
- Show us what the redesigned recreation room will look like – you can decide your style whether it is realistic or fantastical.
- Your submission can be one or both of the following options:
 - o Option 1 – Provide our artists with procedural techniques and tool techniques to add procedural set dressing for variations of this scene. E.g., damage from the bumpy ride or results of conflicting design decisions. These could be tools in the game engine (Unreal Blueprints, Unity C# Scripts etc.) or the DCC (Houdini, Blender, Substance Designer etc.).
 - o Option 2 – Provide our artists with VFX and shaders for different design decisions e.g., how does light come through the window on this planet? What does the weather look like from the window?
You could also choose to have procedural elements built into the shaders. E.g., when you move an asset, the shader can change automatically.

Submission Requirements

- Create an efficient and clean geometry.
- Basic collision setup. Make sure the level is playable.
- Build your solution to be as resolution independent as possible.
- Provide solutions that are easily usable by other members of the art team, and adaptable to other assets and situations.
- Make sure your shaders and/or tools are well documented and organized.
- Make sure tools are transferable and artist friendly.

Thinking Points When Creating Your Submission:

- **Select a limited number of components of your spaceship to showcase your skills.**
- Your tools should be flexible to allow the artists to change the time/setting of the scene later.
- How would you add life to the recreation room?
- How extendable are the systems you have produced, and can they be extended across other aspects of the game?
- What is the trade off between using your solution vs using other alternative solutions?
- Focus more on technical execution than visual quality.

Here are a few ideas you could explore (non-exhaustive):

- Environmental deformation through vertex shaders.
- Procedural animation.
- Volumetric shaders.
- Procedural vistas.
- Procedural prop dressing (vents, wires, organic or inorganic matter etc.).
- Shader based transformations (different weather conditions for instance), both vertex and pixel.
- Shader/VFX for ambience, weather, electronics, etc.
- Houdini (Flow simulation, modular generators for interiors)

Tips:

- Be mindful of **quality over quantity**. A single well-executed idea is recommended over several less ones.
- Efficiency in your tool can be determined by both the performance as well as efficiency in production. For example, a scattering tool which has precise and useful customization allowing quick iteration, with the goal of minimizing any custom adjustments.

- Keep a list of your references, and if using other people's libraries or code, make sure it has a valid usable licence for this purpose and clearly indicated and reference in any code comments.
- Focus on the optimization of your scene. Try to make your scene optimized and game ready (Clean geometry flow, LODs, limit draw calls, instances, etc.).
- In real game production you may not be the only one working on the same tools. Keeping your shaders/tools/blueprints organized and clean makes it easier for others to iterate further as well as review.

Submission Requirements, Documentation & Source Data:

Provide your submission using this [Submission Form](#) and submit your resume [HERE](#).

Your submission package must be named as follows:

NEXT_2023-2024_TechnicalArt_FirstnameLastname.zip

Please **DO NOT** enter your name anywhere inside your submission; only in the Zip file name and your resume.

Your submission package must contain the following six (6) parts (link to the YouTube video should be provided separately in the submission form). **All items below are mandatory.**

1. Up-to-date Resume in PDF format format (in addition to submitting online using the link provided above)
2. Two beauty shots of your Diorama at minimum 1920x1080 resolution (landscape or portrait) set at 300 DPI
3. YouTube video with a minimum resolution of 1080p and between 1 to 5 minutes in duration demonstrating:
 - a. The final interior from a variety of angles
 - b. Showcasing developed solutions
 - c. Tools and workflow
4. A playable version of your project in Unity or Unreal Engine.
5. Documentation of your personal process, how you made your choices, and rationale behind your decisions (PDF – maximum 5 pages):
 - a. 2 Pages - Detailed description explaining what problems you needed to solve and how and why things were done.
 - b. 2 Pages - Description and / or annotated screenshots, and instructions of any shaders or tools you have written;
 - c. 1 Page - References to any resources you used while researching for the challenge (e.g., White papers, tutorial videos, websites)

6. Source files (.zip)
 - a. Shader source code
 - b. All project files including UE4/5 project, Unity, Houdini, source DCC files (Max, Maya, Blender, Substance, Photoshop, etc)
 - c. Source code for any automation or tools. E.g., Python, C#, C++, etc,
 - d. Two technical breakdown shots of your Diorama (wireframe, texture flats, lighting set-up, or anything else you think we should see about your development process).

Judging Criteria

A panel of expert judges will individually rank the overall entry package, out of 50, based on the following criteria:

Innovation of Technical Aspects of the Entry (1-15):

- How does the submission improve on existing solutions?

Difficulty of Technical Aspect of the Entry (1-10):

- How challenging is the Technical Aspect of the solution?
- How complex is the problem that this submission solves?

Elegance of Technical Aspect of the Entry (1-10):

- Is the solution for the proposed technical problem as simple and as optimal as it can be?
- Does the solution work effectively?
- What this submission constructed and executed in a clean way?

Comprehension of Technical Aspect of the Entry (1-10):

- Based on your detailed explanation:
- Can you clearly explain what the technical innovation is?
- Can you clearly explain how the process works?
- Can you articulate the necessity of the tool and the problem it solves?

Creativity and Visual Quality of Entry Package (1-5):

- Creation of original environment designs.
- Expressive emotion, look, and feel in the composition

Key Dates & Deadlines

Submission Deadline: Sunday, January 21st, 2024, 11:59 pm EST

Complete this [Submission Form](#) where you will be asked to provide a link to your submission package. **Late entries will not be accepted.**

Ubisoft Toronto judges will review all submissions and select up to five successful participants to proceed to the interviews. All other participants will be notified of their results via email by **Friday, February 16th, 2024.**

Interviews: February 2024

Finalists will be invited to interview with the Judges.

Ubisoft Toronto judges will select up to three finalists after the interviews. Ubisoft Toronto is the sole judge of this competition and reserves the right to elect the panel as it sees fit; all judgement is final and non-negotiable.

Prizes

- 1st Prize:
 - One (1) paid Technical Art Internship at Ubisoft Toronto. The Internship shall be for a minimum duration of three (3) months at Ubisoft Toronto studio and is currently scheduled to begin May 2023. Dates subject to change at the sole discretion of Ubisoft;
 - One Ubisoft prize pack valued at \$300.
- Finalist Prizes:
 - Display of each finalist's submission in the Ubisoft Toronto NEXT Awards Ceremony;
 - One Ubisoft prize pack valued at \$300.