

TECHNICAL ART



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 apprenticeship and spend the summer learning from the Ubisoft Toronto studio's top talent.

Compete in one of seven disciplines to win an apprenticeship:

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

Last year, 12 students made the transition from student to game developer at Ubisoft Toronto through this program. **Are you next?**

Eligibility

- Currently attend OR have graduated from an Ontario post-secondary school no earlier than Spring 2019
- Are Ontario students or recent graduates with less than 2 years of professional experience in game development
- You must reside in Ontario
- Be eligible to work in Canada
- This challenge must be done individually. Team-based submissions will not be reviewed.

Ubisoft Toronto NEXT: Technical Art Apprenticeship Competition

The Challenge Theme

It is now the year 2608 AD, you're an intergalactic smuggler and you received the below letter from a colleague 3 weeks ago. You haven't heard from them since, so you have decided to investigate.

X,

I'm at 101-Nebula-3, not certain what quadrant though, the transmission is weak, I'll have to send this by written word.

The Caloms are here, the Harients as well, and unbelievably, the Quiral even- I wasn't sure they were even real. Every smuggler guild you can think of. From what I can tell no one is sure of who the client is yet, or even what the full auction stock is for, but the dock is unlike any I've see yet. There's a vehicle which seems so primitive, looks like it could be a "spaceship", but not sure it can warp, no warp shields, plasma engines, or plasma guns. It's almost ancient. It's like a cyborg for a vehicle. Looks like it could still function but have no idea how it works.

Anyhow, this whole place is surreal, somehow familiar but alien to me. I'll keep you posted, for now let's hope we can get something out of this.

-A

Technical Art Brief:

As a technical artist on our futuristic spaceship game, you understand that your job isn't just to create a scene. It's also 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.

Futuristic Spaceship Game Creative Director:

"This game is going to be HUGE. There will be millions of different spaceships, when you visit them, I'd like to ensure that no two bridges are the same."

You settle in to cost out how long it will take to make 1 million unique ship bridges. (1 million/(our 10 artists))*roughly 8 hours a bridge... It quickly occurs to you that attempting to do this with our small team of artists will be a big challenge. So, you approach your Technical Art Director trying to convince them to help you to sway creative direction.

Futuristic Spaceship Game Technical Art Director:

"I'm sorry, the number of different bridges is absolutely core to our vision. I'm also exceptionally busy, I'll have to let you spearhead this issue. Don't worry too much about the props specific to this scene; just figure out how we are going to build the actual bridges themselves. I'd personally start by trying to tackle ways of producing custom layouts and shapes, and then maybe move onto different surface properties to distinguish them. Remember, these must be shippable quality, because, let's face it, the artists won't have time to come and do a second pass. Come back to me with some example of what your approach will produce!"

Please Note: You can enter both the 3D Art track and Technical Art tracks. However to be considered for the 3D Art track you must complete all the requirements in the [3D Art](#) challenge.

This is all about using Technical Art skills to make the [3D Art](#) challenge feasible for a large game. Technical Art is a unique melding of art and technical knowledge.

Construct the ships bridge scene described in the [3D Art](#) challenge in a way that allows for an overwhelming variety of bridges to be created easily (with a wide range of visual difference). If you are only submitting for the Technical Art challenge, we recommend that you **focus on only on building the ships bridge structure and console and chairs while ignoring any additional props requested in the 3D Art brief.**

Submission Requirements & Documentation

****All items are mandatory****

Your application package must contain the following six (6) parts:

1. Cover letter in PDF format
2. Up-to-date Resume in PDF format
3. 3 Different ship bridge interiors in screenshots or in your video
 - Your final submission will require you to problem solve tools and/or workflows which allow quick iterations for the bridge interior. As such show 3 unique bridge interiors built using the workflow
4. A detailed description explaining how and why it was done. Include any of the following if it will help explain your work – in PDF format
 - Any shaders you've written (with a description of how to use them)
 - All tools that were written (with a description of how to use them)
 - Any rigging or procedural source files if applicable (ie, Max/Maya file containing a rig, or a Houdini file used to create some aspect of the scene)
 - What problems did these tools solve? How they will improve the workflows?
 - References to any resources you used while researching for the challenge (eg, White papers, tutorial videos, websites)
5. High-Res JPEG files (separate)
 - Two beauty shots of your Diorama at 1920x1080 resolution (landscape or portrait) at 300 DPI (or Minimum 150 DPI);
 - Two technical shots of your Diorama (wireframe, texture flats, lighting set-up, or anything else you think we should see about your development process).
6. Link to YouTube video with a minimum resolution of 1080p
 - Showcasing developed solutions.
 - Video must be at least 1 minute long.

The application package must be named as follows:

NEXT_2021_TechnicalArt_FirstnameLastname.zip

Please **do not** enter your name anywhere inside of your documentation/video, only in the Zip file name and your cover letter and resume.

Judging criteria

A panel of expert judges will individually rank the overall entry package, out of 40, based on the following criteria:

Technical Art Criteria:

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

- Has the problem already been solved in online tutorials, and GDC talks?
- Is the Technical aspect of the challenge a new use or take on existing techniques?

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

- How challenging is the Technical Aspect of the Entry?

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?

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

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

If you are also submitting to the 3D Art challenge, please review the judging criteria. See the 3D Art [brief](#) for more details.

Ubisoft Toronto will designate up to five finalists, dependent on the recommendations of the Ubisoft Toronto judging panel. Ubisoft Toronto is the sole judge of this contest and reserves the right to elect the panel as it sees fit; all judgment is final and non-negotiable.

Tips

- The Technical Art Challenge focus is on the environment itself, do not worry about unique props
- **However**, if you are applying for Technical Art **AND** 3D Art, please make sure to include all requirements, including props, from the 3D Art Challenge Brief.

- 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 after using the tool.
- Be very clear about what is your work and what is not. Keep a list of references you've used, and if using other people's libraries or code, make sure it has a valid usable licence for this purpose.
- We value quality over quantity. While we won't stop you from tackling every single technical challenge, we will more favourably judge a single well-executed area over several mediocre ones.
- Great way to showcase your technical abilities is to focus on optimization of your scene as well as the final visual quality. Try to make your scene optimized and game ready (LODs, limit drawcalls, instances, etc.).
- A tool is great if it works fast and gets the job done. However, in real game production you may not be the only one working on the same tools. Keeping your shaders/tools/blueprints organized and clean make it easier for others to iterate further as well as review.
- Here are some techniques you can use to problem solve. These are not all inclusive, there are many others:
 - Post FX, Visual Effects, and Shaders
 - Use a diverse variety of shaders and materials to the scene. We are looking for technically sophisticated, and interesting shaders that bring the description of the story to life.
 - We are expecting the use of both vertex and pixel shaders to create a dynamic scene.
 - Bonus points for introducing compute shaders into the mix.
 - As well as providing interesting visuals, the shaders may also be used to differentiate each generated ship bridge.
 - Content Creation Automation – Houdini, Blueprints or otherwise
 - This focus is all about making the computer do the work for you. Whether you procedurally build the entire scene, set dress it procedurally, or simply produce tools that speed up some aspects of the workflow, use your mystical abilities to create a scene that manual labour alone would have difficulty building.

Key Dates & Deadlines

Want to stay on top of the competition? Sign up for reminders, tips, and important updates at <http://toronto.ubisoft.com/next-sign-up/>

Submission Deadline: Sunday March 21st, 2021, 11:59 pm EST

Complete this [submission form](#) where you will be asked to provide a link to your submission package.

Please note that late entries are not permitted.

Interviews: April-May 2021

Selected candidates will be invited to an online apprenticeship interview.

Prizes

- 1st Prize:
 - One (1) paid Technical Art Apprentice position at Ubisoft Toronto. The Apprentice position shall be for a length of three (3) months at Ubisoft Toronto studio, and is currently scheduled to begin May 31st, 2021. Dates subject to change at the sole discretion of Ubisoft;
 - One Ubisoft prize pack valued at \$300.

- Finalist Prizes:
 - Display of each finalist's Technical Art submission during the Ubisoft Toronto NEXT Awards Ceremony;
 - One Ubisoft prize pack valued at \$300.

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.