



Highlights of This Issue:

- Launch of the YTT ARchive Mobile App!
- Project Ambassador Training



Upcoming Events Promotion !!

Smart Ecological Game-based Learning Station

Every weekend, we launch a Smart Ecological Game-based Learning Station. Through interactive games and AR smart applications, the public can learn about the island's ecology and even win prizes by completing tasks!

Day-and-night Ecological Workshops

(to be held in April–May 2026)

Participants will learn about ecological survey findings and related village cultural stories, identify the key species, and discuss ideas on conserving and revitalising island's natural and cultural resources in Yim Tin Tsai.

AR-based Guided Tours

(tentatively scheduled for Jun–Aug 2026)

Participants can explore different habitats in the village, listen to Yim Tin Tsai's natural and cultural stories, and use mobile application to unlock species and enjoy interactive photo-taking experiences.

Overview

The research project, **'Application Research on Augmented Models and Smart Experiential Engagement in Ecological Conservation of Yim Tin Tsai, Sai Kung'** successfully launched on 1 September 2024. For easy recognition, we have named the project **Exploring YTT Nature ARchive**.

This project is funded by Countryside Conservation Funding Scheme (CCFS) and the Countryside Conservation Office (CCO) under the category of 'Research Activities on Countryside Conservation and Revitalisation'. It is in collaboration with the Division of Integrative Systems and Design at The Hong Kong University of Science and Technology, Outdoor Wildlife Learning Hong Kong, Yim Tin Tsai Village Committee, and the Salt and Light Preservation Centre.

The project team is utilising **Augmented Reality (AR) technology to showcase the ecological richness of Yim Tin Tsai (YTT)**, creating an innovative, interactive, and engaging learning experience that attracts the participation of the community and the public, raise awareness and a sense of responsibility for nature conservation, and further promote the comprehensive and sustainable conservation of Yim Tin Tsai's natural and cultural values.

Throughout the three-year project period, a series of research activities and public events are planned, including ecological survey, day-and-night ecological workshop, smart ecological game-based learning station, and AR-based guided tours.

Whether you are a nature lover or a technology enthusiast, please stay tuned for updates on this project!

Scan the QR codes to visit our website and social media platforms for latest event information and research findings updates!

Instagram



Facebook



Website





Launch of YTT ARchive Augmented Reality (AR) mobile game

For this issue of newsletter, we will introduce the AR mobile app and its core technological functions.

YTT ARchive is a mobile augmented reality game that turns your visit to Yim Tin Tsai into an interactive wildlife treasure hunt. As you walk around the island in real life, the app uses GPS to guide you through different habitats where you can learn about animals and landmarks native to Yim Tin Tsai.

The main objective of the game is to unlock all the species on the Journal page. By leveraging AR and GPS technology, you can explore the island's nature and wildlife in real time, all while preserving its natural heritage.

App Features

Real-time Location Tracking: Begin Your Animal Exploration Journey

This feature makes your Yim Tin Tsai journey lively and interactive:

- Through the integration of Google Maps within Unity (a game development platform), we are able to track the player's real-time location if you are walking on the Yim Tin Tsai island.
- As you stroll around Yim Tin Tsai, your avatar moves simultaneously on the map, which clearly marks different habitats and the animals that reside there.
- The game automatically detects when you arrive at an animal's habitat and unlocks the species, adding an element of surprise to your exploration.
- When an animal is unlocked, you can tap its icon to enter the Journal page and dive deeper into background information and fun facts.

Download & Install

Device compatibility: Requires iOS 15+ or Android 8+ with a rear-facing camera.

Download: Available on the App Store and Google Play.

Permissions: Allow camera and location access when prompted for full functionality.



Take photos with 3D animal models, share with friends!

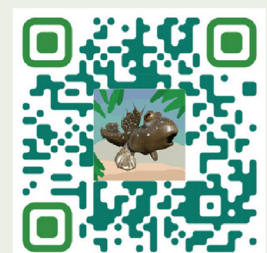
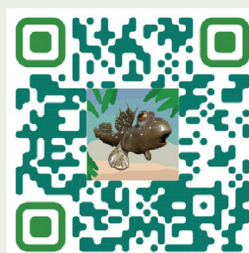
AR Photo Mode: Capture Yim Tin Tsai's Ecology with Friends

- By utilising Unity's AR platform, we can use the player's camera to detect a floor plane.
- Upon successful detection, players can place the virtual animal species into your real-world camera view and tap to place the animal which they can resize and rotate.
- To ensure the animals look vivid and lifelike in your photos, we have implemented a lighting-matching mechanic that allows the animal to match the corresponding lighting environment from the player.
- The app also includes Sharing Function, enabling you to instantly share your photos with friends and upload them to social media.

YTT AR-chive 程式下載 QR code
QR codes for download YTT AR-chive

iOS

Android



讓我們一起探索鹽田梓的大自然！
Let us explore the nature of Yim Tin Tsai together!

App Navigation

Main Menu: Icons for “Map”, “Journal”, “Settings”, and “About”.

Map: The digital map showing the locations of the selected species.

Journal: User’s collection of the species.

Settings: Select your preferred language, mode (on island or not on island), and reset the journal under Settings when necessary.

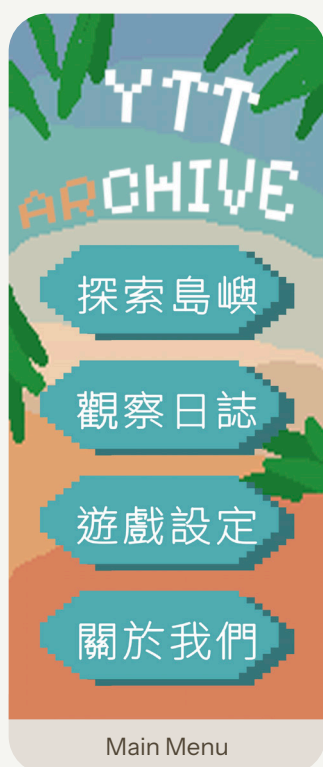
About: The project information.

How to play?

After arriving at Yim Tin Tsai, open the app and select the “Map” button. As you move physically around the island, your avatar moves on a stylized map, with habitats marked as Points of Interest where specific animals reside.

When you approach an animal’s habitat, the game **automatically detects your location and unlocks the species**. You can then tap its icon to enter the Journal page to learn more, where background information and fun facts about each species are provided.

From the Journal, you can also activate the **AR Photo Mode**, you can launch the AR Photo Mode to place them into your real-world camera view and capture photos with fully rendered 3D models, perfect for sharing with friends and social media.



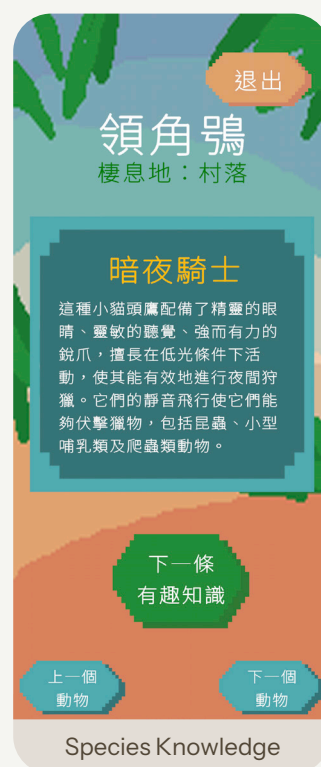
Main Menu



Map



Journal



Species Knowledge

What animals can you see in the YTT ARchive mobile game?

Collared Scops Owl

The Collared Scops Owl is a nocturnal resident of Yim Tin Tsai’s village, feeding on insects, spiders, rats, and toads. Its distinctive territorial call is a down-slurred “Who~” that echoes through the forest at night. One of the island’s most popular animals, it attracts dedicated visitors who often stay till after dark just to catch a glimpse or hear its territorial call echoing through the trees.

Great Blue Spotted Mudskipper

The Great Blue Spotted Mudskipper thrives in Yim Tin Tsai’s salt pans, feeding on diatoms, debris, and algae. Native to warm and subtropical regions like Hong Kong’s coastal areas, these amphibious fish hide in mud burrows during high tide and emerge to “walk” on land using strong pectoral fins when tides recede. In Yim Tin Tsai, players will encounter this quirky creature in its salty habitat.



Curious about the story behind YTT ARhive? Discover how this AR mobile game came to life!



Development process

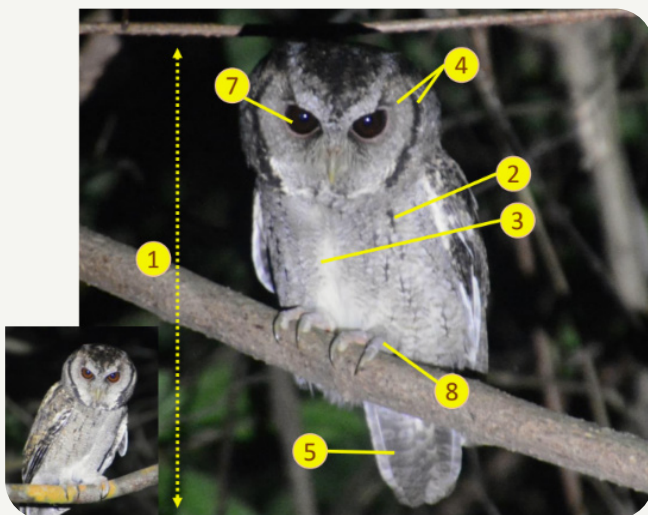
1. **3D modelling & processing:** Use software such as Blender, ZBrush, 3D Painter, and Maya to create the 3D models and animation of the selected species, with models refined based on professional comments by the ecological research team.
2. **3D-printing & testing:** Small-scale 3D prints were created to verify accuracy.
3. **AR integration:** Ecological survey data and species information were embedded into the projection of the learning station and the AR app.

How to create 3D characters for Yim Tin Tsai?

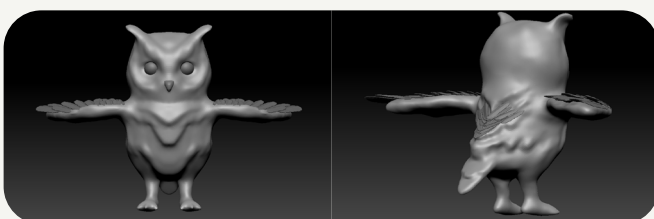
Imagine that you can stroll through Yim Tin Tsai, encounter the special species living on the island with just a flick of your finger, and start a wonderful journey...Our team is planning to launch such an interesting AR mobile game! To develop, it requires the use of 3D modeling to shape various 3D animal characters.

3D modeling is like kneading plasticine in 3D space. By adjusting the shape of polygons, you can create surfaces or objects. These 3D models can also be used in animations and games later. Today, let us reveal the 'hatching process' of the 3D character owl, to learn about the process of making 3D characters:

1. **Concept Art:** Based on the species' actual appearance and characteristics, start with sketches to visualize the character's look and personality.



2. **Modeling:** Bring your concept to life using 3D modeling software, creating a detailed mesh.



3. **Texturing:** Add colors and details with textures, making the character vibrant and unique.



4. **Rigging/Animation:** Bring the character to action with dynamic animations and movements.

5. **Implementation:** Integrate the character into the game engine for players to explore!



Creating characters for games is an exciting and interesting journey! Our team is exploring and designing new protagonists of the Yim Tin Tsai AR mobile game. Looking forward to finding your partner in the game!

Smart Ecological Game-based Learning Station

The mobile application will be integrated with the learning station's 3D-printed island terrain model. The learning station offers visitors an immersive preview before they set out on their island adventure. This hands-on exhibit features a detailed 3D printed model of Yim Tin Tsai Island, enhanced by a projection mapping system that dynamically overlays key information right onto the physical terrain. The projection highlights animal habitats and locations, alongside historical facts about the island's rich past, from salt production to village life.

Future updates will add interactive elements, creating memorable learning moments that blend physical model interaction with digital storytelling for all ages.

Future Development

With the continued development of the app, we plan to introduce more features:

- Quiz games: Allow players to deepen their understanding of animals while earning chances to win postcards and miniature animal figures.
- New animal unlocking: Provide more animals for players to interact with.
- More exciting content is coming soon!



An App Game integrating smart technological innovation into nature conservation of Yim Tin Tsai

Through the blend of location-based exploration, AR interaction and 3D Learning Station, YTT ARchive mobile application encourages visitors of all ages—especially adults curious about nature, to slow down, look closer, and leave the island knowing its wildlife by name, story, and habitat.



Successful Completion of Project Ambassador Training!

Bringing Diverse Talents Together

We are pleased to introduce nine Project Ambassadors from diverse academic disciplines at The Chinese University of Hong Kong. They each share a common passion: contributing their unique skills and enthusiasm to Yim Tin Tsai.

Empowering Through Professional Training

Starting in October 2025, our project ambassadors underwent a series of online and on-site training sessions to gain in-depth knowledge of Yim Tin Tsai's historical and cultural background, its diverse ecology and species, while also learning guided tour and storytelling skills. They visited the island for field studies, exploring mangrove, shrublands, and the areas surrounding the salt pans. Through these experiences, they learned to introduce Yim Tin Tsai in an engaging way not through rote memorization, but through heartfelt and sincere sharing.

During the training, the ambassadors also had the opportunity to try the team's newly developed "YTT ARchive" augmented reality mobile application, mastering how to interact with virtual animals through technology to add an extra layer of fun to ecological tours.



Self-design and Co-creation

The ambassadors worked in groups to design their own tour routes and content, planning guided activities centred around the island's ecology, village stories, and AR experiences. Every route is the effort of their planning, discussion, and hands-on practice, also a true reflection of their creativity and dedication.

Becoming the New Force of the Project

These ambassadors successfully passed their guided tour examination assessments. The first group ambassador who completed the assessment, officially became our tour guide in January 2026, sharing the cultural and ecological stories of Yim Tin Tsai with visitors.



They are now also assisting the project team in operating the "Yim Tin Tsai Smart Ecological Game-based Learning Station", introducing the interactive projection-based augmented reality models, AR applications and taking photos with selected 3D species models, allowing everyone to experience the seamless integration of technology and nature.

In the future, we will organise more public events where you can meet these passionate ambassadors in person and listen to the stories they have to tell about Yim Tin Tsai.

Project Ambassador Sharing

I had visited YTT before becoming a project ambassador. Its greenery, blue sky and sea impressed me a lot. The Hakka culture and Catholic history are preserved and featured by the salt pans, St Joseph's Chapel and Ching Po School. As a project ambassador, I am committed to protecting this amazing island. In the training, I understood more about this island through villagers' stories and observations of the ecosystem, as well as hands-on experience in organizing tours. We explore YTT together with the visitors, and we learn together.

Sitting in front of the Salt & Light Preservation Centre, though the shining sea sometimes reflects sunlight and irritates my eyes a bit, I am pleased to see visitors excited about their journey and immersing themselves in nature and history. I am always amazed by the serene, doggies with tail wagging, people interacting among others and nature, and the tasty kiln-roasted chicken.

If I could live on YTT forever, my answer would be, "Why not?"

— Yoyo Wong (Geography and Resources Management, CUHK)



As a Project Ambassador, I visited Yim Tin Tsai for the first time. My main duties are to introduce the AR mobile application to the public and invite them to follow our Instagram and Facebook pages in exchange for postcards. The significance of this programme is that through the training, I gained an in-depth understanding of Hakka culture and planned our own guided tour routes with my groupmates. In the process, I experienced the charm of rural culture and developed a deeper passion for this place.

— Yoey Lin (Cultural Management, CUHK)

I first heard about Yim Tin Tsai when I got the mass email about recruiting project ambassadors. Being an introverted person, I hesitated at first but applied with a friend's encouragement and was successfully selected.

During the training, I learned a lot about the island's cultural heritage and also about its ecological value.

For my first AR tour, I was extremely nervous and kept worrying I'd forget my script. But once I started talking, I relaxed a bit more and got into it. It actually went better than I expected, and people seemed to respond positively so that made me feel like I could actually do this. The experience definitely helped with my communication skills, and I understand the ambassador role much better now. I want to keep sharing this island with more people.

— Jasmine Cheung (Geography and Resources Management, CUHK)

