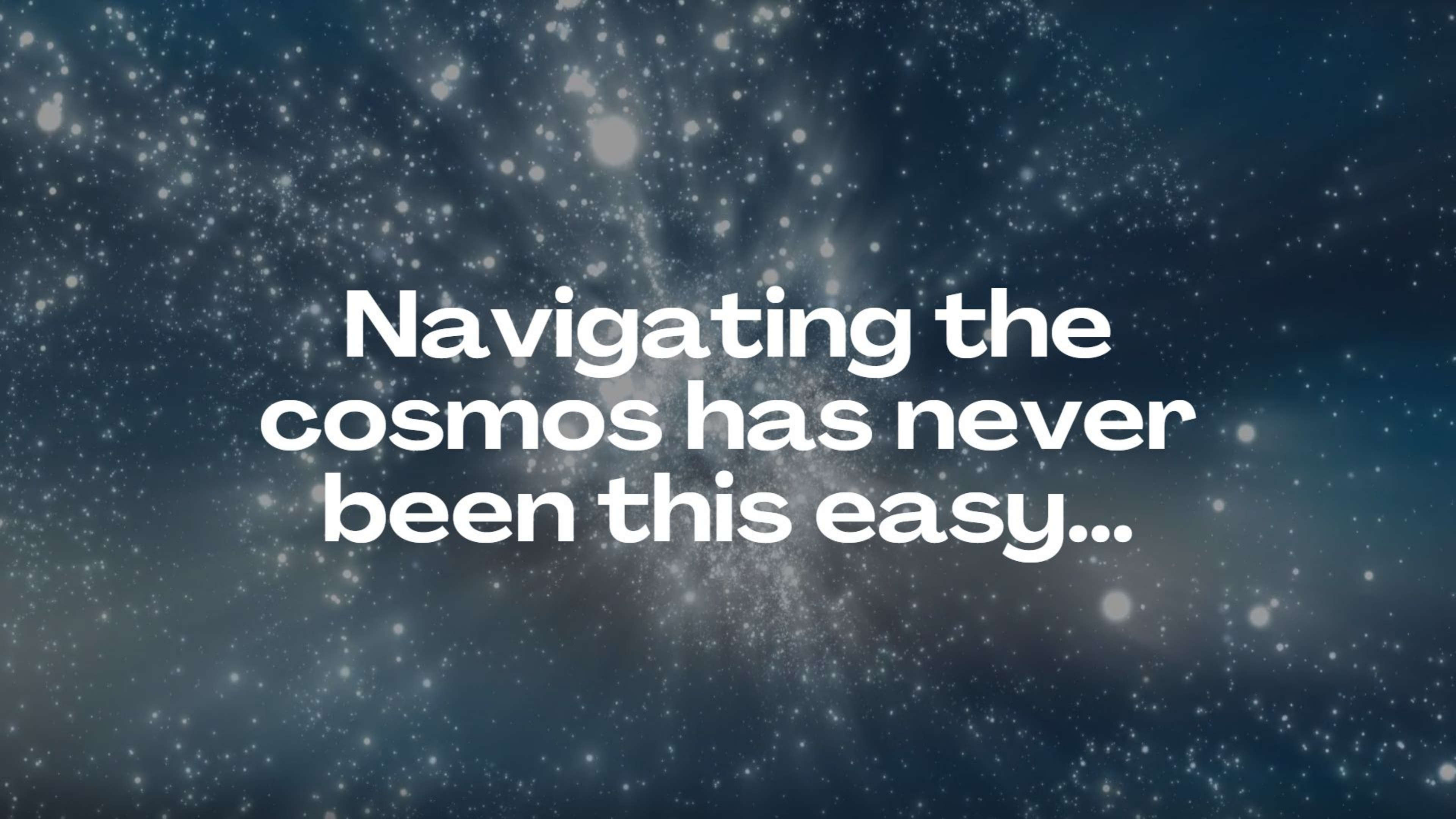
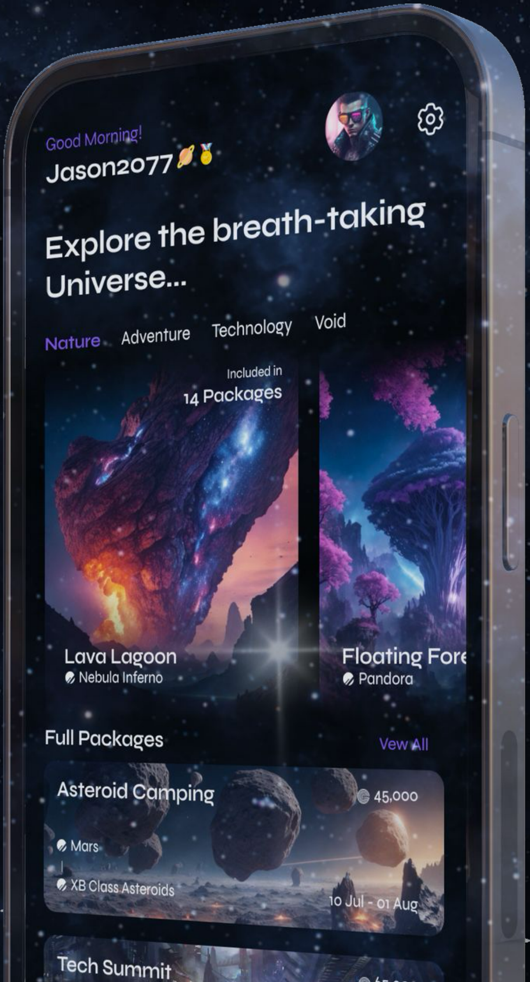
WELCOME TO 2077



Navigating the cosmos has never been this easy...

Explore the Cosmos

Explore the vast universe filled with beautiful and magical planets



Good Morning!

Jason2077

Explore the breath-taking Universe...

Nature Adventure Technology Void

Included in 14 Packages

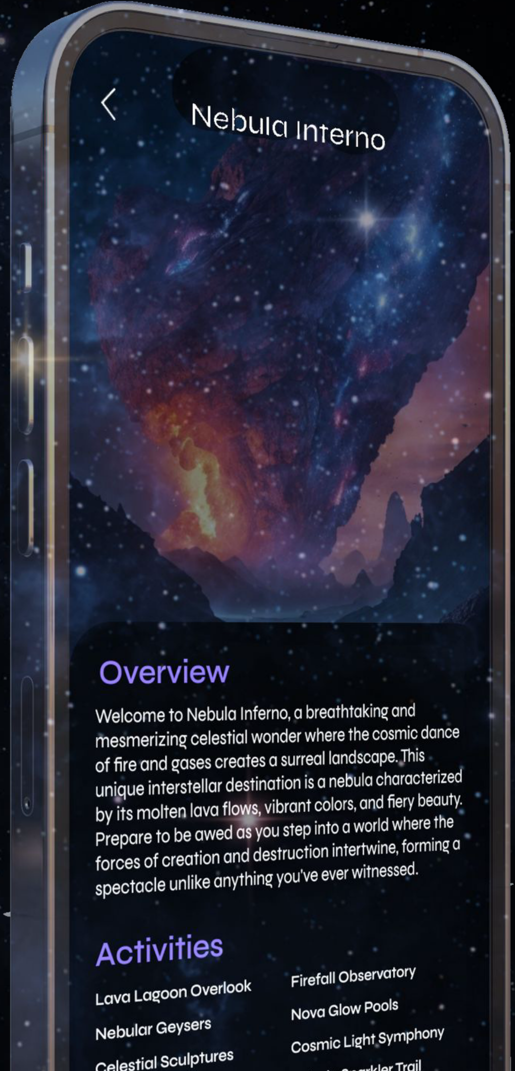
Lava Lagoon
Nebula Inferno

Floating Fore
Pandora

Full Packages View All

Asteroid Camping 45,000
Mars
XB Class Asteroids
10 Jul - 01 Aug

Tech Summit



Nebula Interno

Overview

Welcome to Nebula Inferno, a breathtaking and mesmerizing celestial wonder where the cosmic dance of fire and gases creates a surreal landscape. This unique interstellar destination is a nebula characterized by its molten lava flows, vibrant colors, and fiery beauty. Prepare to be awed as you step into a world where the forces of creation and destruction intertwine, forming a spectacle unlike anything you've ever witnessed.

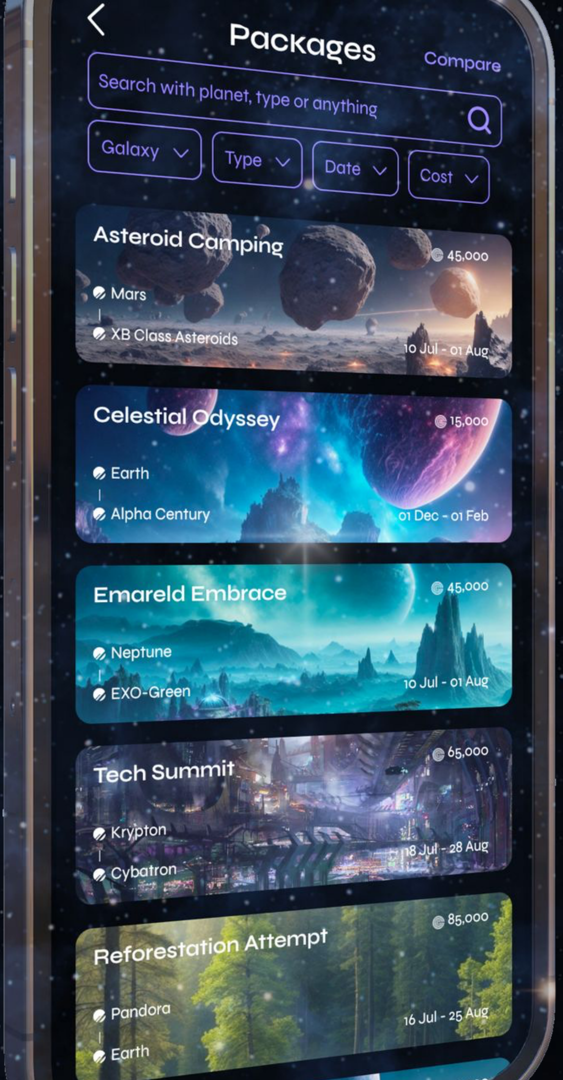
Activities

Lava Lagoon Overlook
Nebular Geysers
Celestial Sculptures

Firefall Observatory
Nova Glow Pools
Cosmic Light Symphony
Sparkler Trail

Can’t think of a plan?

Choose from a wide variety of pre-built packages where we take care of everything for you...



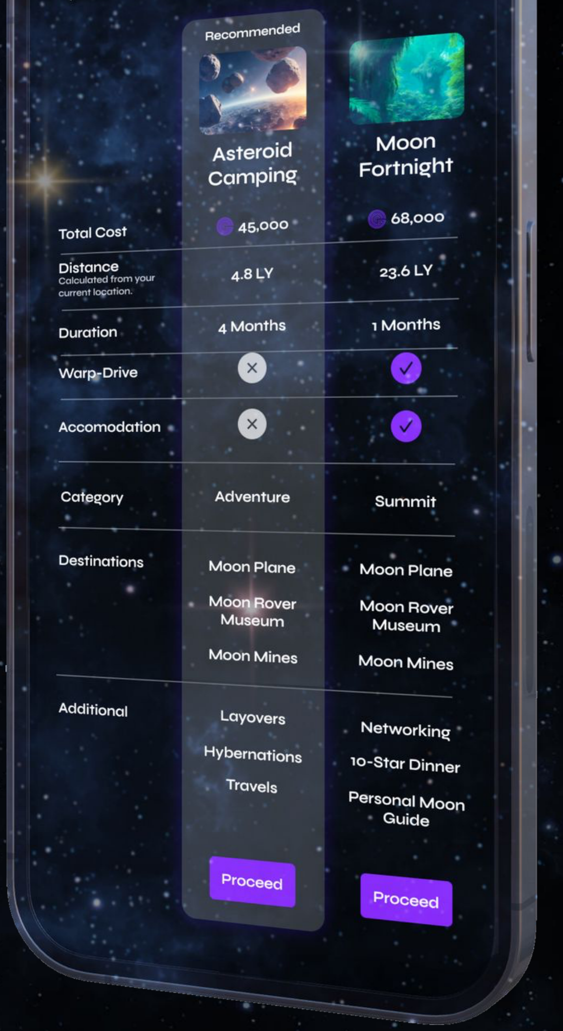
Packages

Compare

Search with planet, type or anything

Galaxy | Type | Date | Cost

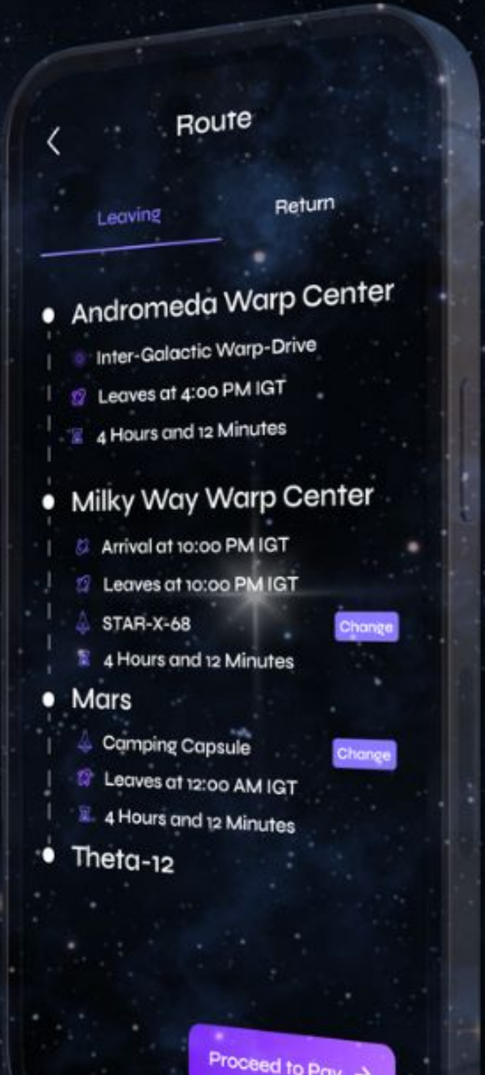
Package	Cost	From	To	Dates
Asteroid Camping	45,000	Mars	XB Class Asteroids	10 Jul - 01 Aug
Celestial Odyssey	15,000	Earth	Alpha Century	01 Dec - 01 Feb
Emareld Embrace	45,000	Neptune	EXO-Green	10 Jul - 01 Aug
Tech Summit	65,000	Krypton	Cybatron	18 Jul - 28 Aug
Reforestation Attempt	85,000	Pandora	Earth	16 Jul - 25 Aug



	Recommended Asteroid Camping	Moon Fortnight
Total Cost	45,000	68,000
Distance Calculated from your current location.	4.8 LY	23.6 LY
Duration	4 Months	1 Months
Warp-Drive	✕	✓
Accomodation	✕	✓
Category	Adventure	Summit
Destinations	Moon Plane Moon Rover Museum Moon Mines	Moon Plane Moon Rover Museum Moon Mines
Additional	Layovers Hybernations Travels	Networking 10-Star Dinner Personal Moon Guide
	Proceed	Proceed

Convenient Booking

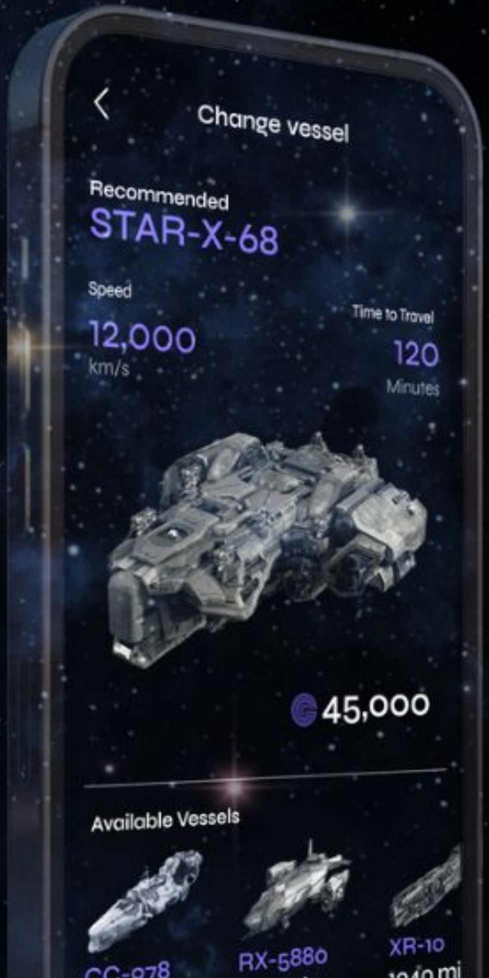
Book trips that span multiple planets and galaxies with a single flow.



Route

Leaving | Return

- Andromeda Warp Center
  - Inter-Galactic Warp-Drive
  - Leaves at 4:00 PM IGT
  - 4 Hours and 12 Minutes
- Milky Way Warp Center
  - Arrival at 10:00 PM IGT
  - Leaves at 10:00 PM IGT
  - STAR-X-68 Change
  - 4 Hours and 12 Minutes
- Mars
  - Camping Capsule Change
  - Leaves at 12:00 AM IGT
  - 4 Hours and 12 Minutes
- Theta-12



Change vessel

Recommended
STAR-X-68

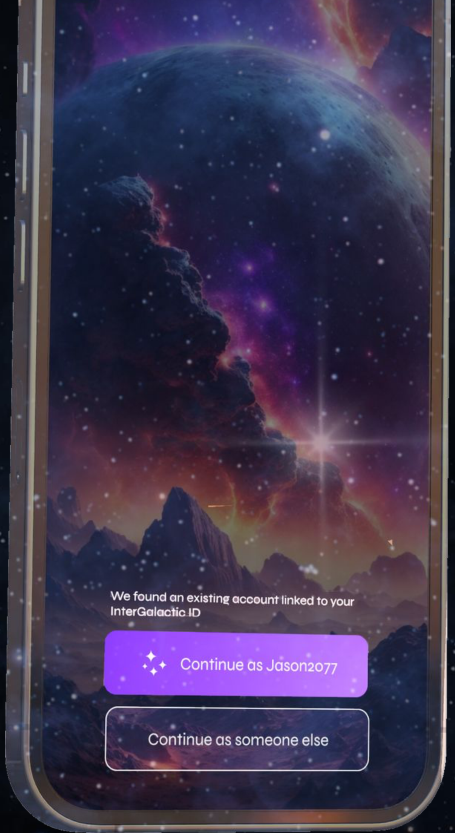
Speed
12,000
km/s

Time to Travel
120
Minutes

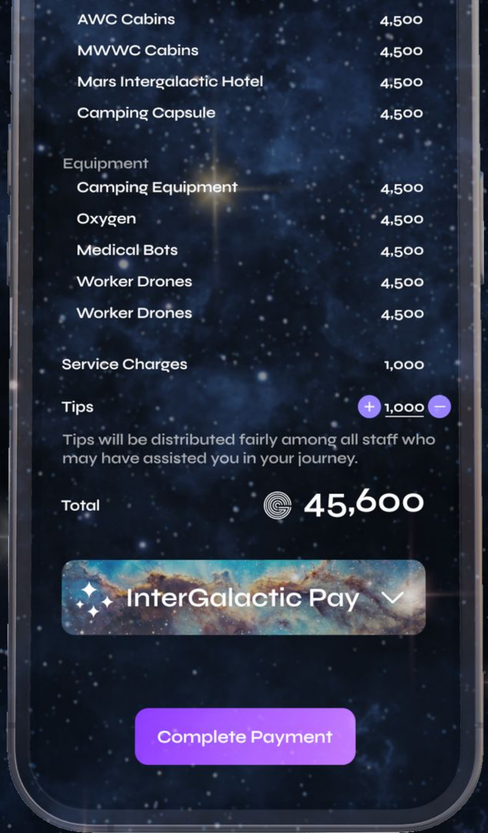
45,000

Available Vessels

Feel at home,
anywhere,
anytime



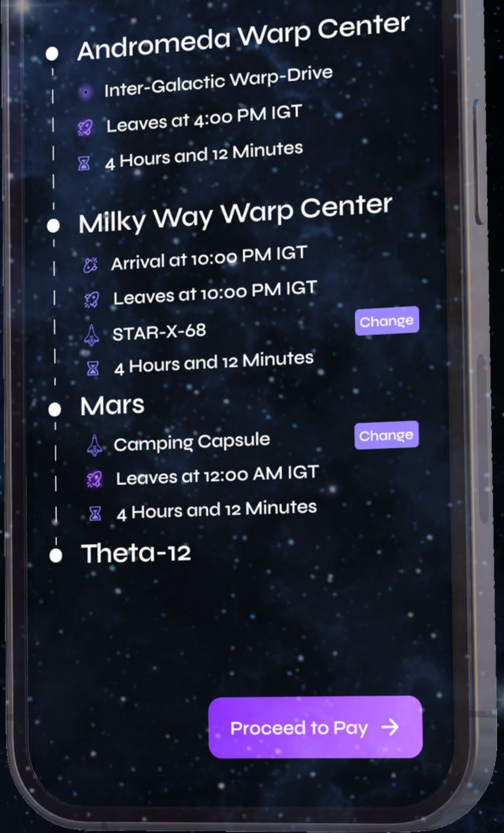
We found an existing account linked to your InterGalactic ID



AWC Cabins	4,500
MWWC Cabins	4,500
Mars Intergalactic Hotel	4,500
Camping Capsule	4,500
Equipment	
Camping Equipment	4,500
Oxygen	4,500
Medical Bots	4,500
Worker Drones	4,500
Worker Drones	4,500
Service Charges	1,000
Tips	+ 1,000 −

Tips will be distributed fairly among all staff who may have assisted you in your journey.

Total 45,600



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InterGalactic Identity System

InterGalactic Digital Currency

InterGalactic Time Zones

One more thing...

Revolutionizing the Medical field with

MACHINE LEARNING

98.9%

Accuracy in detecting brain tumors from MRIs

Utilizing both

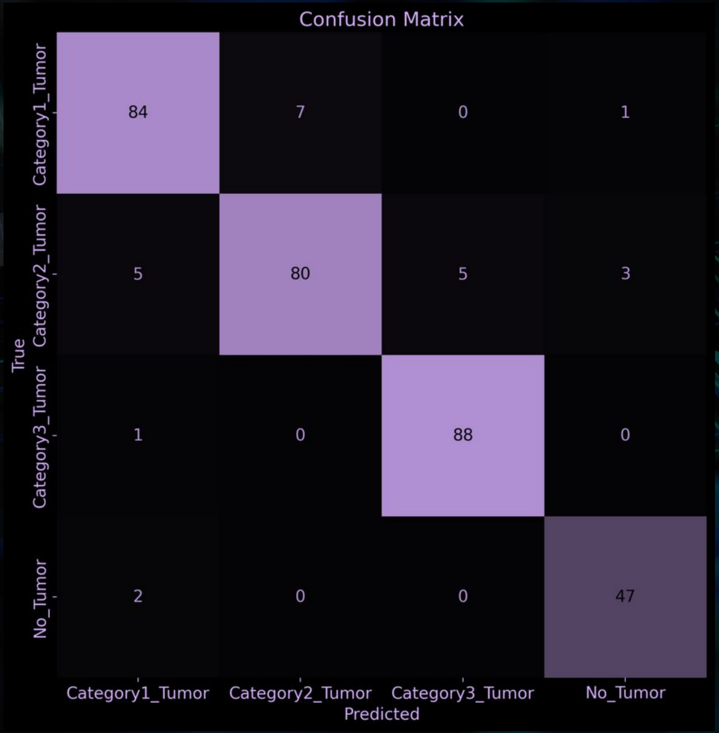
Convolutional Neural Networks (CNN)

Artificial Neural Networks (ANN)

Improved accuracy using

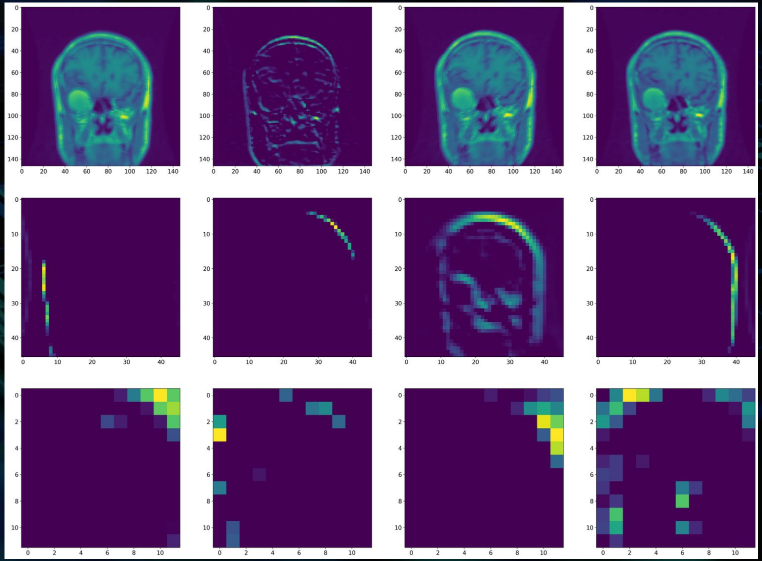
Hyperparameter tuning

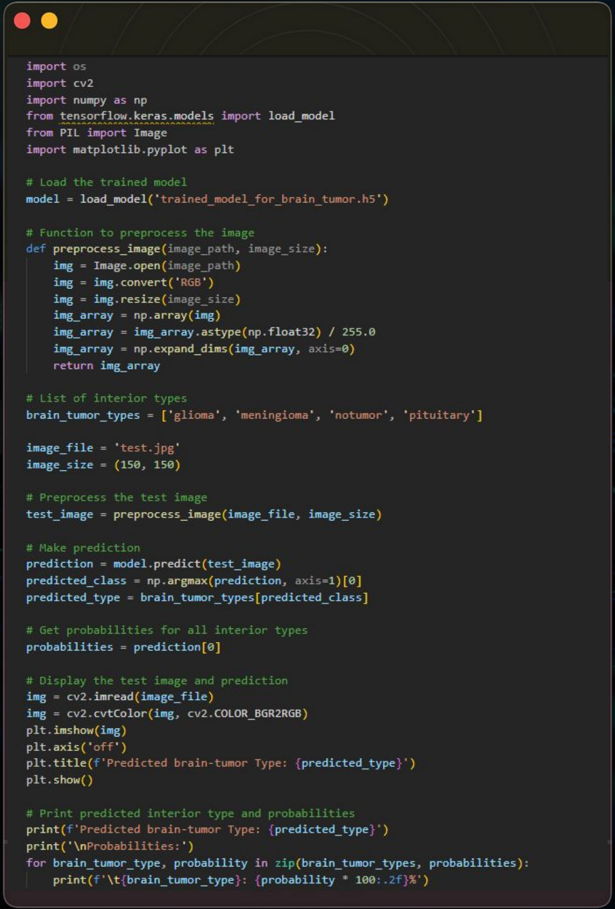
Confusion matrix and Feature maps



Confusion Matrix

True \ Predicted	Category1_Tumor	Category2_Tumor	Category3_Tumor	No_Tumor
Category1_Tumor	84	7	0	1
Category2_Tumor	5	80	5	3
Category3_Tumor	1	0	88	0
No_Tumor	2	0	0	47





```python
import os
import cv2
import numpy as np
from tensorflow.keras.models import load_model
from PIL import Image
import matplotlib.pyplot as plt

# Load the trained model
model = load_model('trained_model_for_brain_tumor.h5')

# Function to preprocess the image
def preprocess_image(image_path, image_size):
    img = Image.open(image_path)
    img = img.convert('RGB')
    img = img.resize(image_size)
    img_array = np.array(img)
    img_array = img_array.astype(np.float32) / 255.0
    img_array = np.expand_dims(img_array, axis=0)
    return img_array

# List of interior types
brain_tumor_types = ['glioma', 'meningioma', 'notumor', 'pituitary']

image_file = 'test.jpg'
image_size = (150, 150)

# Preprocess the test image
test_image = preprocess_image(image_file, image_size)

# Make prediction
prediction = model.predict(test_image)
predicted_class = np.argmax(prediction, axis=1)[0]
predicted_type = brain_tumor_types[predicted_class]

# Get probabilities for all interior types
probabilities = prediction[0]

# Display the test image and prediction
img = cv2.imread(image_file)
img = cv2.cvtColor(img, cv2.COLOR_BGR2RGB)
plt.imshow(img)
plt.axis('off')
plt.title(f'Predicted brain-tumor Type: {predicted_type}')
plt.show()

# Print predicted interior type and probabilities
print(f'Predicted brain-tumor Type: {predicted_type}')
print('\nProbabilities:')
for brain_tumor_type, probability in zip(brain_tumor_types, probabilities):
    print(f'\t{brain_tumor_type}: {probability * 100:.2f}%')
```

What is the use of a medical ML Model, if a doctor can't use it..."

So...

A Mobile App

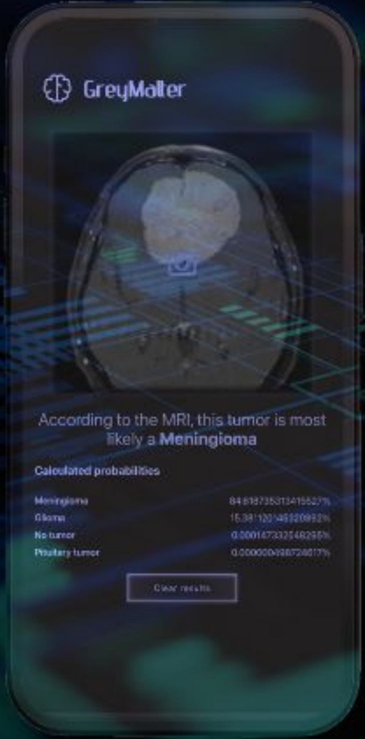
Step 01

Use your mobile phone
to do an MRI

Step 02

Let GreyMatter's powerful
ML Model process
the MRI and find if you have
any Brain Tumors

Step 03



According to the MRI, this tumor is most likely a **Meningioma**

Calculated probabilities

Meningioma	84.618735313415527%
Glioma	15.381120146320992%
No tumor	0.0001473325482956%
Pituitary tumor	0.0000004987246017%

Get instant results
with high accuracy

CHALLENGES

WE HAVE OVERCOME

We had 3 days to...

Develop the FrontEnd UIs

Develop the Backend Functionalities

Implement a database structure

So we decided to go with...

VUE.JS

TS

Typescript

NESTJS

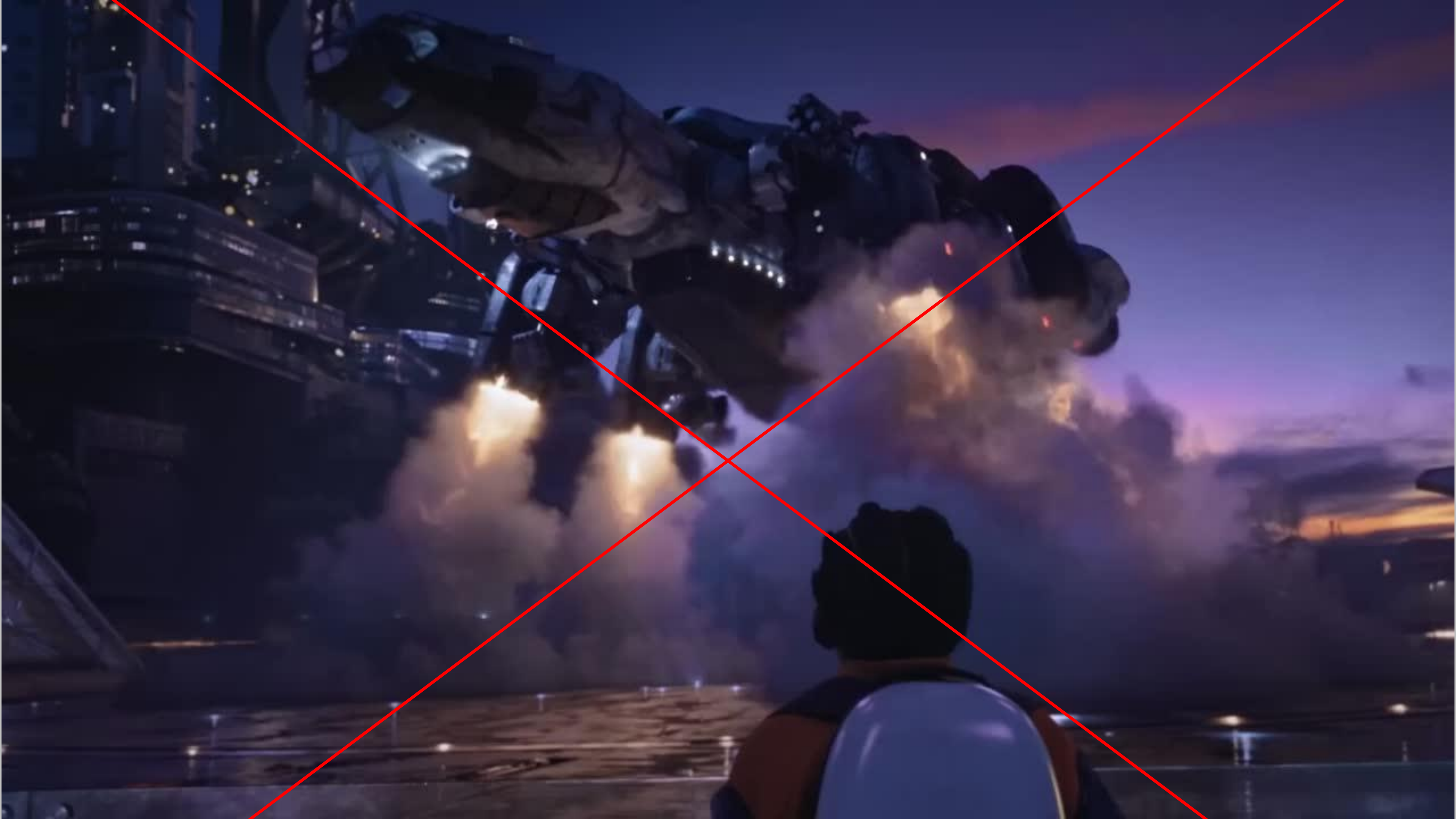
PostgreSQL

Dataset Troubles

70%
Training

20%
Validating

10%
Testing

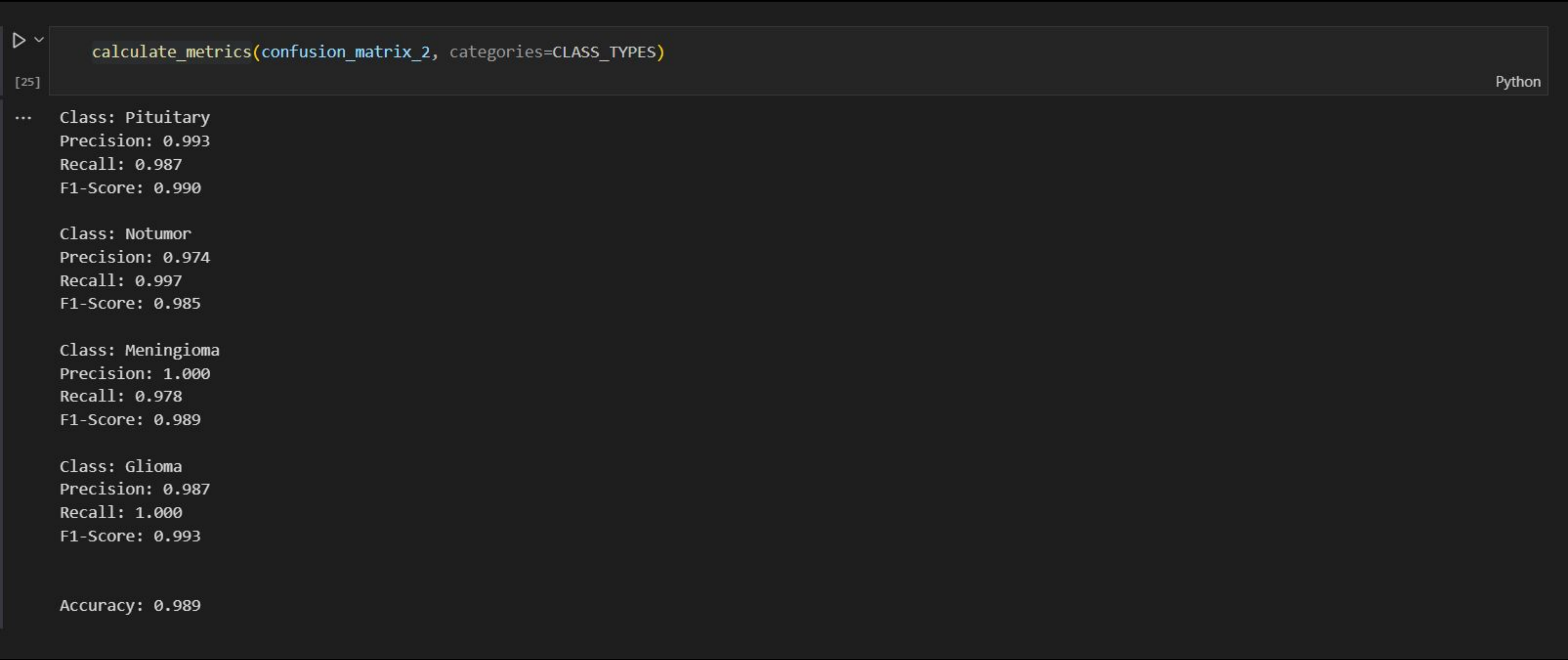


Thank you

Open for questions

Footage Credits

Ready Player One
Eve Online
Starfield



```python
calculate_metrics(confusion_matrix_2, categories=CLASS_TYPES)
```

```
Class: Pituitary
Precision: 0.993
Recall: 0.987
F1-Score: 0.990

Class: Notumor
Precision: 0.974
Recall: 0.997
F1-Score: 0.985

Class: Meningioma
Precision: 1.000
Recall: 0.978
F1-Score: 0.989

Class: Glioma
Precision: 0.987
Recall: 1.000
F1-Score: 0.993


Accuracy: 0.989
```