

# INTERNSHIP: Image-to-Image Generative Deep Learning

# LOCATION

Station F, Paris, France (remote work possible)

# ABOUT YOKAI

At Yokai, we're re-inventing photography with generative AI and 3D reconstruction.

We believe that most photo production will be programmatically generated in 5 years, disrupting the creative freedom of photographers, brands, advertising agencies and visual storytellers in general. We're building that future.

Focused on **breakthrough research in deep learning**, we strive to push the state-of-the-art forward to shape the future of photorealistic imagery.

Advisory board:

- David Picard
- James O'Brien
- Edmond Boyer
- Dmitriy Smirnov

Research partners:

- <u>DFKI</u>
- <u>INRIA</u>
- <u>Réseau Curie</u>

Accelerators:

- Founders Program de Station F
- <u>Google Cloud Startup Program</u>
- NVIDIA Inception Program

## MISSION

Help Yokai's R&D go beyond the state of the art in certain key areas of **photorealistic image synthesis**.

#### TASKS

- Help create, train and tune large-scale deep nets to solve problems in challenging computer vision domains ;
- Help carry out an ongoing technology and science watch in the field of generative AI;
- Analyze, implement, tweak and help improve bleeding edge research for generating and editing photorealistic images and scale it to production ;
- Help specify research projects ;
- Help create and augment datasets in order to improve the performance of deep nets ;
- Help deploy machine learning model into production

#### SCIENTIFIC PROBLEMS TACKLED

- Re-encoding of non-generated photos into the latent space of a pre-trained cGAN
- Optimization and disentanglement of latent vectors
- Use of attention and fine-tuning
- Supervised detection of latent directions and advanced disentanglement of the obtained directions
- Unsupervised detection of latent directions corresponding to disentangled changes in images
- Fine-tuning of GANs on image datasets

#### COMPENSATION

1800 € per month

#### **MORE INFO**

https://yokai.ai/

### APPLY

https://yokai-ai.typeform.com/to/YC4rjxSW

