



SIGGRAPH ASIA 2019 Tencent Careers



Tencent

Tencent is an internet-based technology and cultural enterprise with its mission: Improve the quality of life through internet value-added services. Through the company's two principal business operations, 'social platforms' and 'digital content', Tencent develops and delivers game-changing products.

From comics, videos, games and animation to music, literature, films and news, Tencent offers an incredible array of first-class digital content and multi-media services, providing entertainment and cultural enrichment to over 1 billion users across the globe.

Tencent also provides cutting-edge financial technology and seamless mobile payment solutions that are helping support the development of smart cities, smart transport and smart retail with its values: integrity, proactive, collaboration and innovation.

Location: Multiple locations

Job Openings

1. **Computer Graphics/Computer Vision Research Scientist from Tencent AI Lab Computer Vision Center**

Tencent AI Lab Computer Vision Center enables computers to understand the real visual world. Research areas: image / video editing, generation, analysis, understanding; object / face detection, tracking, and recognition; character recognition, 3D vision, SLAM, visual reinforcement learning.

Responsibilities:

Research, design, implement, evaluate, and optimize effective AI models & algorithms to help or replace humans in content creation, completion, and repairing scenarios.

Requirements & Qualifications:

- PhD degree in computer science, related technical fields, or equivalent practical experiences.
- Strong coding skills in C/C++, Python, and one shell script.
- Publications at top-tier peer reviewed conferences or journals in computer vision, computer graphics, and machine learning.
- Working experiences with one of deep learning platforms: TensorFlow/PyTorch/CNTK/MXNet.
- Strong abilities to communicate/collaborate with researchers/engineers.

If interested, please submit your application to wilhelmyang@tencent.com



2. VFX Supervisor from NEXt Studios, IEG, Tencent [Shanghai, China]

NEXt Studios aims to make differentiated, high quality and reputable games via multiple approaches including but not limited to original idea incubation, advanced technology application as well as external collaboration. We experiment with new designs, create new experiences, research new technologies, work across platforms and game genres, to explore future possibilities in gaming as a unique media and keep pushing the boundaries. NEXT, boundless play! Click [here](#) for more information.

Responsibilities:

- Understand the entire production process and approving the work of all crew on the show.
- Verify technical solutions proposed by team members.
- Work closely with director to develop and interpret their creative vision.
- Oversee the artistic supervision of the shots to bring them to final.
- Communicate with external production companies.
- Coordinate the management of a show and project schedules to ensure that work is delivered to deadlines.

Project Description:

- (1) 3D Virtual Idols.
- (2) Productions including but not limited to MV, Short Film, Video Ads, VLog, Live Performance, AR Show.

Requirements & Qualifications:

- 5+ years VFX production experience must be recent and continuous.
- Solid knowledge of Maya, AE/ Nuke. Familiar with Unreal Engine 4 is a big plus.
- Solid previous experience as CG Supervisor.
- Creative eye and aesthetic judgment with a deep understanding of composition, cinematic design and animation timing.
- Must have an understanding of Directing/Lighting/Camera work/Practical Effects/Camera Gripping/Art Department/Production Design and Props.
- Excellent understanding of composition, light and color with strong attention to detail.
- On-set supervision experience is a plus.
- Ability to meet strict deadlines often under pressure.
- Excellent communication, organization skills and financial and budget management skills.
- A thorough understanding of the CG & 3D principles and pipeline.
- Proven team leader with strong motivational qualities.
- Technically and creatively astute.
- Able to effectively communicate with people at all levels

If interested, please submit your application to chengge@tencent.com



3. Computer Vision Research Intern/Research Engineer/Research Scientist from Tencent Youtu Lab [Shanghai/Hefei, China]

Tencent YouTu Lab is an AI research department in Tencent, which is a main part of Tencent AI Strategy. Following the user-oriented philosophy and the productization principle, we focus on applying machine learning, pattern recognition and image cognitive technologies to real-world scenarios and rapidly become one of the world top groups in AI Industry. With dozens of leading technologies, our research covers face/body/car detection, recognition and analysis, optical character recognition (OCR) and image understanding and generation etc. Click [here](#) for more information.

Responsibilities:

- R&D innovative algorithms and solutions in computer vision(2D/3D), deep learning, computational photography/imaging and other related areas.
- Optimize algorithms to match the business needs of Tencent and Industrial Internet
- Publish paper and present original research work at conferences and events

Requirements & Qualifications:

- MS or Ph.D. in CS/CE/EE and related areas.
- Solid knowledge in computer vision, deep learning, and computational photography/imaging.
- Strong communication skills.
- Strong programming skills in Python/C++.
- Familiar with mainstream deeplearning frameworks like PyTorch/TensorFlow/Mxnet/Caffe and common libraris(e.g. OpenCV)
- Good at problem abstracting and solving
- Bonus: paper published on top-tier conferences and journals, winner of top-class challenges

If interested, please submit your application to yvonnewang@tencent.com



4. Senior Researcher/Engineer - Video Processing and Understanding from Tencent Media Lab [Beijing, China / Palo Alto, USA]

Tencent Media Lab is a global leader in International Standard development, from multimedia compression and delivery systems to emerging 5G, AR/VR and Cloud platforms.

Deeply rooted in the long-term forward-looking research, Media Lab has been offering the industry the best-of-breed audio and video communication and delivery related services for a widely diversified range of applications. The state-of-the-art and end-to-end solution encompasses our distinguishing features in audio/video encoding, decoding and transcoding, AI-aided audio/video processing with a proven track record of achievements on assorted hardware and demanding use cases; a cross-layered holistically architectural design combining internet-robust complex network technologies with adaptive multimedia content analysis and processing; an intrusive and non-intrusive data-driven evaluation of audio and video perceptual quality; and last but not least, a scalable and modular framework offering the powerful and stable SDK functions for manifold commercial use cases.

Tencent Media lab's mission is to transform and provide the premium and seamless communication and multimedia content delivery experience through innovation and creativity.

Click [here](#) for more information.

Responsibilities:

- Video processing algorithm research and development for video denoising, super-resolution, artifact reduction, video frame-rate up-sampling, video stabilization, video enhancement, visual quality assessment.
- Video understanding algorithm research and development for activity recognition/detection, video classification, video auto-editing, ROI detection, and many other computer vision related video tasks.
- Algorithm implementation and optimization to deliver SDK for the cloud and mobile platforms.
- Document the algorithm development and contribute towards creating Intellectual Property.

Requirements & Qualifications:

- MS/Ph.D. in Computer Science, Computer Engineering, Electrical Engineering, or closely related fields
- Solid experience in developing and optimizing image/video processing and computer vision algorithms
- Solid programming skills and C/C++, Python coding abilities
- **Other desirable experiences or skills:**
 - Code optimization skills in algorithm/instruction level (SSE/Neon/Halide/OpenCL/OpenGL/OpenMP/CUDA/HVX)

If interested, please submit your application to shanl@tencent.com



- Familiar with deep learning frameworks such as tensorflow/pytorch, inference frameworks such as NCNN/TFLite/SNPE/MACE
- Experience in multimodal understanding, temporal modeling and feature extraction
- Experience in building SDKs and frameworks
- Experience in OpenCV, FFMPEG, Git
- Good communication skills in written and spoken English, self-motivated, fast learner of new technologies

5. Wechat Video Research Engineer from WeChat Multimedia Center

WeChat Multimedia Center keeps exploring cutting-edge technologies in audio/video/image coding and processing. Our self-developed Wechat Audio and Video Engine(WAVE) has been applied in all kinds of WeChat multimedia services for hundreds of millions users, such as video call, Moments, Message, Sticker and WeChat Official Accounts Platform, etc. We forge ahead to achieve better audio and video quality at a reasonable operation cost.

Responsibilities:

- Research on state-of-the-art technologies related to video coding, image processing and video transmission strategy
- Develop and improve low latency, high performance, multi-platform video/image system for WeChat multimedia services

Requirements & Qualifications:

- Excellent software development skill in C/C++, data structure and algorithms, and solid research background in computer vision, video coding or image processing;
- Extensive hands-on experience in coding, and strong logical thinking ability and fast learning capability is required;
- Familiar with H.264/AVC/HEVC/VVC/AVS/VPx/AV1 video coding standards and x264/x265/FFmpeg open source projects;
- Publications in top international journals/conferences in computer vision, signal processing or adopted proposals on video coding standards is a plus;
- Self-motivated, good communication skills and teamwork spirit.

If interested, please submit your application to cicelygu@tencent.com