Previous Projects (main contribution)

Tencent America:



- UE5 plugin
- Snow rendering
- Multiple scattering



- Photogrammetry
- Texture delighting
- Shadow removal



- Image generation
- Diffusion models
- Relighting

During PhD:



- Forward rendering
- Layered BSDF
- PBRT-v4



- Volume rendering
- Wave optics



- Inverse-rendering
- SVBRDF
- MaterialGAN



- Procedural material
- Bayesian theory
- MCMC sampling

Human face related:



- Virtual try-on
- Prescription glasses Face rendering



- Face relighting



- Eye rendering
- Eye reconstruction