# **Chen Liu**

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## **Education**

### **University College London**

London, UK

PhD in Computer Graphics

09/23 - Present

Research Topics: (Dynamic) Appearance Modeling, (Inverse) Rendering, Diffusion Models, ...

#### **University College London**

London, UK

MSc in Computer Graphics, Vision, and Imaging

09/21 - 09/22

Grade: Distinction, Overall 90.25%, Thesis 95%

## **Beihang University**

Beijing, China

BEng in Computer Science

09/17 - 06/21

Grade: Major GPA 3.9 / 4.0, Undergraduate Scholarship, Academic Prize

# **Publications**

#### Generative Video Bi-flow

Chen Liu, Tobias Ritschel

International Conference on Computer Vision (ICCV 2025)

### **Neural Differential Appearance Equations**

Chen Liu, Tobias Ritschel

ACM Transactions on Graphics (Proceedings of SIGGRAPH Asia 2024)

#### Learning to Learn and Sample BRDFs

Chen Liu, Michael Fischer, Tobias Ritschel

Computer Graphics Forum (Proceedings of Eurographics 2023)

# **Employment**

### **Graphics Engine Support for Game Development**

05/20 - 02/21

Graphics Engine Intern

**ByteDance** 

- Cel-shading Solution: implemented the entire rendering solution for characters in our game
- Shader Coding: created a billboard-based godray shader, a cloudsea texture with Parallax Occlusion Mapping, a semi-translucent crystal material, etc
- UE4 Development: modified UE4 sources to add a custom shading model which makes low-cost but decent translucency possible

## **Services**

Conference Reviewer: SIGGRAPH ASIA 2025, ICCV 2025, CVPR 2025, PG 2024

Journal Reviewer: Computer Graphics Forum (CGF)

Volunteer: Eurographics (EG) 2025, Eurographics Symposium on Rendering (EGSR) 2024, GAMES101

Grader 2021

**Teaching Assistant at UCL:** Computer Graphics (COMPO027), Image Processing (COMPO026)

## **Awards**

The Rabin Ezra Scholarship
UCL PhD Research Studentship (fully funded by Meta)
Beihang Excellent Undergraduate Scholarship (5%)
<b>Beihang Outstanding Academic Performance Prize (2%)</b>

2025

2023 - 2027

2018, 2019

2020