Thanks!

Thanks to all you students
for your hard work, attention,
creativity & flexibility. We enjoyed
spending time with you this semester.
We wish you the best on your next adventure!

Thanks to our terrific TAs, Alfredo, Anjali, Connor,
Daniel, Irene, Jessica, Neerja, Meiqi, Mingyang,
Tianyun and Winston for their care and dedication.

Credit: Pixar, Up

Announcements (4/25/2024)

Course Evaluations

- Your evaluations matter -- please complete!
- We care for course improvement; Berkeley cares for tenure / promotion
- https://course-evaluations.berkeley.edu

Final project (details on Ed)

- Report / video due Tue 4/30
- Presentations on Thu 5/2
- Strict: absolutely no late days.

Final Project - Presentation Sessions Format

- Check Ed for session time assigned for your group.
- You are expected to show up for duration of your session. (Can also come to other sessions to see.)
- Profs and TA teams will traverse from group to group; present when we get to you.
- Present to other students while you are waiting.

Final Project - Final Week Advice

General:

- Shipping mindset! Tune for compelling imagery
- Make crystal clear what your starting point was, and what you built (e.g. before / after images)

Presentations:

- Time flies (1.5 min to prof; 5 min to TAs). Practice!
- Explain your project in the first two sentences: what did you do, and why does it matter?
- Show your best images / do demo up front

Other Cool Classes in Visual Computing

- CS184/284A Foundations of Graphics and Imaging (Ng)
- CS180/280A Computer Vision and Comp. Photography (Kanazawa/ Efros)
- CS294-137 Theory and Applications of Virtual Reality & Immersive Computing
- CS284B Advanced Computer Graphics (O'Brien)
- CS294-127 Computational Imaging (Waller / Ng) - EE290
- CS294-164 CS194-164 Computational Human Vision (Ng)
- CS280 Computer Vision
- EE118 Intro to Optical Engineering (Waller)

Other Cool Classes in Visual Computing

- CS198 Decal on Game Design + Development
- CS198 UCBUGG
  DeCal on 3D Modeling and Animation
- CS198 Decal on Virtual Reality

CS194/294-164 | Computational Human Vision

Ren offering course in Fall 2024

- Info on Ed #595, link to prior year course
- Sign up on the waitlist if you are interested; enrollment decisions / size by application
- Research-focused seminar; semester-long project
- One of last year's projects will be published at SIGGRAPH 2024
- Talk today will give a view into some of the associated research

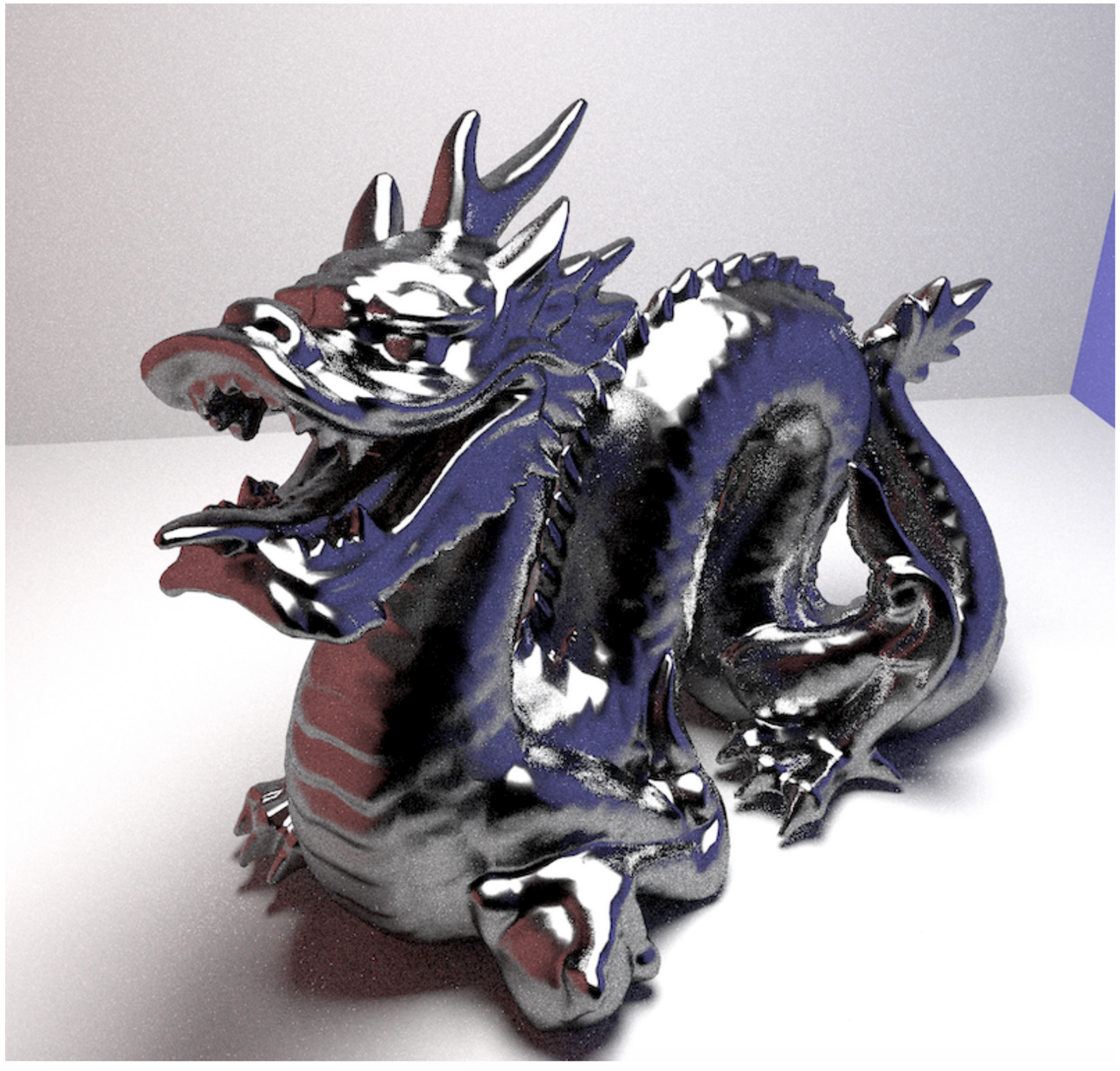
(U)GSIs

CS184/284A will be taught in Spring 2024

- Please drop a note before end of this semester if you are potentially interested in being a TA
- I will be recruiting for new head TA, uGSI and GSI positions.

Art Competition #3 Results

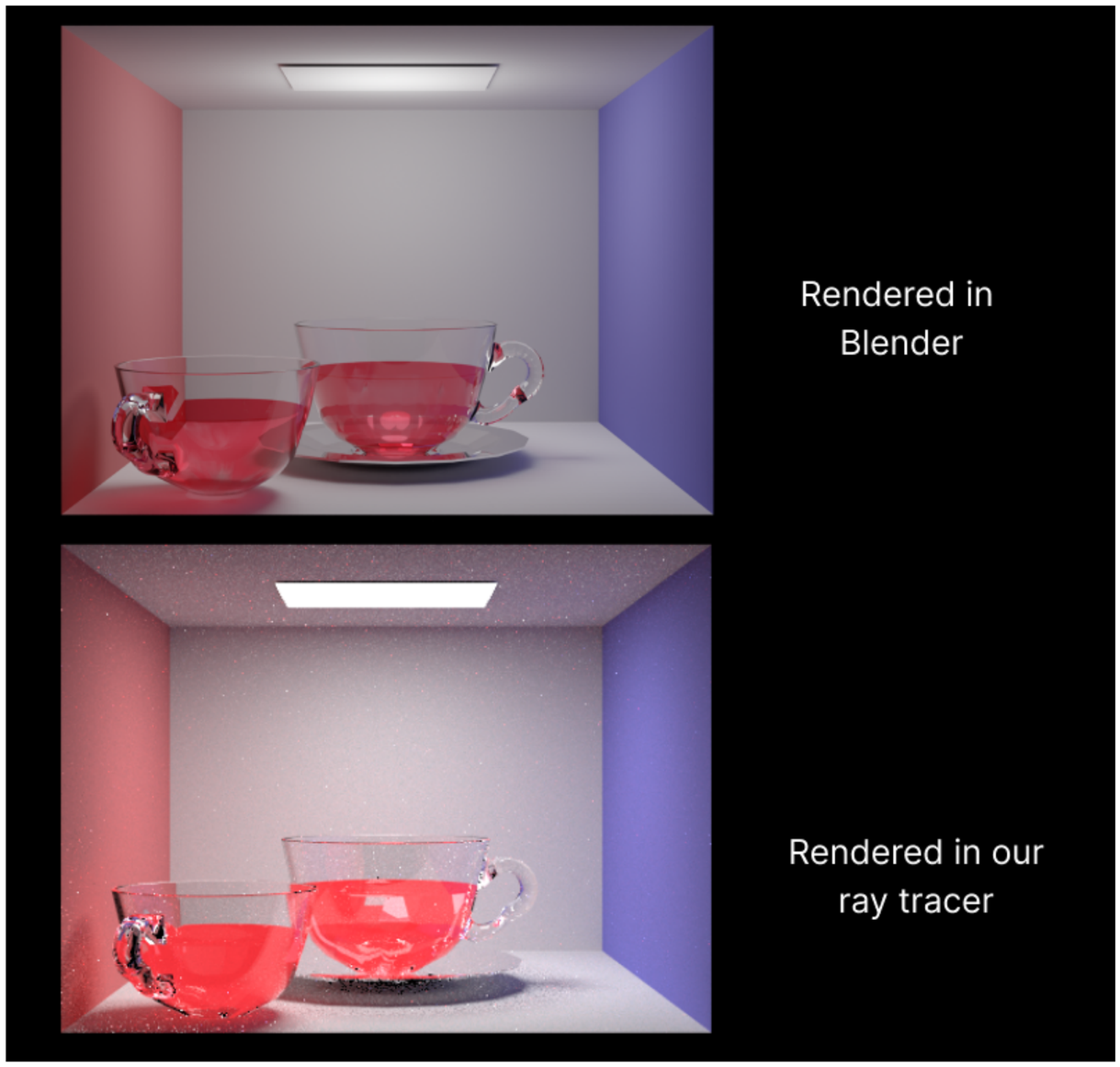
Art Competition #3 – 3rd Place Winner



Rebecca Feng & Mahum Khan

A dragon made of mercury! Dangerous to the touch.
We followed the CS184 Spring 2022 Pathtracer 2 spec for implementing Microfacet materials, taking into account Fresnel effects, and importance sampling for Beckmann normal distribution functions. The parameters that we passed into our Fresnel term to achieve a glossy, mercury-effect were 0.1 for alpha, which achieves a glossy effect with lower values, eta = (1.8795, 1.5472, 1.1353), which represent the refractive indices in the RGB channels, and k = (5.1076, 4.6437, 3.9980), which represent the extinction coefficients in the RGB channels. As always, rendering took way too long. (4 hours)

Art Competition #1 – 2nd Place Winner



Yuan Xu &
Yunting Zhao

Cup and Plate, Jamaica and Mate: There are two glass cups of Jamaica on the silver plate in the cube box. Share a cup of tea with your mate! ~

We first modify the ray tracer of Project 3 to accept BSDF of more materials (mirror, glass and liquid). We implement the glass material BSDF by calculating the direction of reflection and refraction with the given IOR (index of refraction) of the glass. Next, we build our own cups, plate and liquid models in Blender and export them into a Collada file (.dae file). We modify the Collada parser and the parameters in dae file to add mirror, glass, and liquid materials on the model. Finally, we get our result image after rendering by the ray tracer. ./pathtracer -t 8 -s 2048 -l 16 -m 100 -r 480 360 -f CBtea.png ../dae/CBtea.dae (14 hours)

Art Competition #1 – 1st Place Winner

Raine Koizumi & Arjun Palkhade

birds in the snow

I modeled the birbs with icospheres and used diffuse materials for all the shaders. I spent most of the time trying to reverse engineer collada files and fixing bugs in my existing raytracer code. Bonus points if you know the name of these birds!

6 hours