# Lindsay Kornguth

Creative Technologist



Portfolio Site



Github

# Experience

#### **General Technical Director Intern**

Walt Disney Animation Studios
June 2024 - August 2024 (Burbank, CA)

- Engineered two tools to match demands of production, elevating efficiency of crowd workflows in Maya
- Collaborated closely with stakeholders to identify pain points and create user-centric tools
- Gained insight into USD scene composition for featurelength film production

## R&D Intern, CLO / Marvelous Designer

June 2023 - August 2023 (Culver City, CA)

- Prototyped client-facing GUI for physically-based garment simulation using Qt
- Generated technical documentation and code tutorials for node graph data structures and algorithms
- Implemented whitepaper on hierarchical graph drawing to optimize node UI layout algorithm by one order of magnitude

## Animation Production Intern, Partizan Studio

January 2023 - May 2023 ( Remote )

- Oversaw scheduling and production management in ShotGrid
- Reformatted a contact database with 1,200+ new profiles, enhancing data accessibility and usability for production teams.

# Immersive Experience Design Intern, MERGE

May 2022 - August 2022 ( Remote )

 Developed XR application software using rendering pipeline in Niantic 8th Wall, including javascript API and three.js

## Achievements/ Extracurriculars

- Dean's List Honors (x5), Columbia University
- Co-Founder, CU Last Call, ('22-'23)
- Featured Artist , Ratrock Magazine ('22)
- Al Safety Research Fellow, Columbia Effective Altruism ('22)
- ► USA All-American Team 1, USA Fencing ('17-'19)
- Founder/President, Miramonte HS Chess Club ('15-'19)
- US Chess Federation Top 50 Players (Ranked by Age)

#### **Technical Skills**

**Programming Languages**: C++, Python **Frameworks**: USD, Qt, PyQt, STL, Three.js

**Tools**: Git, Jira, ShotGrid **3DCCs**: Maya, Houdini, Unity

#### Education

## **Columbia University**

B.A. in Computer Science **GPA**: 3.8 | 2019 - 2023

## **Graduate Certificate**

#### Stanford University, SCPD

Visual Computing Certificate GPA: 4.3 | 2024 - 2025

#### Relevant Coursework

Computer Graphics: Rendering	A- (3.6)
Computer Graphics: Animation & Simulation	A+ (4.3)
▶ UI/UX Design	A+ (4.3)
► Image Systems Engineering	TBD
Linear Algebra	A- (3.6)

# **Projects**

- Procedural Animation (Houdini) Animation reel featuring cloth and fluid simulation, rigid body dynamics, and character animation/rigging.
- Interactive IK Rig & Keyframe Tool (WebGL, Three.js) -Real-time rigging tool with CCD inverse-kinematics solver, joint constraints, and dynamic posing/ interpolation with keyframe editor.
  - Node Graph Visualizer (C++, javascript, Qt) Developer-facing graphical interface that displays nodes and dependencies for real-time PBR garment simulation software.
  - Ray Tracing Engine (C++) Monte Carlo Ray Tracer built from scratch featuring global illumination, optimized anti-aliasing techniques, UV texture-mapping, scene-wide BVH
  - VR Music Video (8th Wall, WebGL, Three.js) Immersive VR/XR music video with custom 3D avatar, animation cycles, environment map, and particle animations.