

CASA 2019: Capturing real-world data for characters, sometimes with machine learning

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(Editing ongoing)

Philosophy: Aim for something between a tutorial/course and a workshop where we build in some interactivity... Preparing some questions and exercises ahead of time to spur discussion.

Wednesday July 3rd:

Part I: Building the Look

09:30 – 11:00 Session I: An Introduction to Appearance Capture Methods

- Course Introduction (**Patterson**)
- Personal Introductions (**Patterson, Casas, Dhillon**)
- —interactive period: interests, applications, affiliations of participants—
- Overview of Day Course (**Patterson**)
- Considerations in Acquiring Geometry (**Patterson**)
- —interactive period: experience and future ideas from participants—
- Fundamentals of Material Modeling (**Patterson**)
- Acquiring Information for Material Modeling (**Patterson**)
- Accessories: Clothes, Hair, Teeth, and More (**Patterson**)
- —interactive period: experience and future ideas from participants—

11:00 – 11:30 Coffee!

11:30 – 13:00 Session II: Capturing the Appearance of Human Skin

- Composition and Optics of Skin (**Dhillon**)
- Modeling Sub-surface Scattering (**Dhillon**)
- —interactive period with exercises—
- Models for Skin Appearance (**Dhillon**)
- Acquisition Methods (**Dhillon**)

13:00 – 14:30 Re-fueling: Lunch at CNRS

Part II: Making Things Move

14:30 – 16:00 Session III: Preparing for Animation

- Establishing Correspondence and Re-Topology (**Patterson**)
- Expressions and Rigging (**Patterson**)
- —interactive period: experience and future ideas from participants—
- Markerless MoCap for Bodies and Hands (**Casas**)
- —interactive period: experience and future ideas from participants—

16:00 – 16:30 More Coffee!

16:30 – 18:00 Session IV: Moving Characters

- Animation of Bodies and Clothing (**Casas**)
- —interactive period: experience and future ideas from participants—
- Closing (**Patterson**)