

## Personal Inquiry: List of main references.

Chiang, M. J., Bitterli, B., Tappan, C. and Burley, B., 2016. A Practical and Controllable Hair and Fur Model for Production Path Tracing. *EUROGRAPHICS 2016* [online] 35 (2).

This journal has given me insight into one of the current possible approaches by Walt Disney's R&D of parameterizing, calculating lighting for fur and rendering fur in computer graphics, which was used for the film Zootopia 2016. It has opened my mind and view to the depth and complexity of the algorithms and calculations involved in the creation of realistic and efficient CG fur. It is also interesting how they relate and study the science of animal fur and customize their tools and algorithms to provide for this species differentiation as well as aiming to create intuitive parameters for artists to control.

FBI.GOV, 2004. *Microscopy of Hair Part II: A Practical Guide and Manual for Animal Hairs* [online]. Available from: [https://archives.fbi.gov/archives/about-us/lab/forensic-science-communications/fsc/july2004/research/2004\\_03\\_research02.htm](https://archives.fbi.gov/archives/about-us/lab/forensic-science-communications/fsc/july2004/research/2004_03_research02.htm) [Accessed 19 May 2017].

This publication provides relevant scientific information regarding internal and external characteristics of a variety of animal fur. It has been useful to understand key elements of the nature and behaviour of fur and to then see its relationship and application within the computer graphics' generating fur methodologies.

Pluralsight, 2015. *Hair and Fur introduction in Houdini 15* [online]. Available from: <https://www.pluralsight.com/courses/houdini-15-hair-fur-introduction> [Accessed 19 May 2017].

This link provides good introductory reference material to using the shelf tools in Houdini 15 to generate, shade and render hair and fur. I have used this knowledge as my main instruction when creating my black leopard fur test in Houdini.

Watanabe, Y., Suenaga, Y., 1990. Chapter 3: Rendering. Parameter Controlled Hair Rendering in Backlight. *CG International '90*. [online]. Tokyo: Springer-Verlay, 175-184.

The book provides a curious study on one of the first examples and publications of creating fur and hair in computer graphics. It is very interesting to see how the basics of parameters and ways of calculating and designing hair/fur wherein the early 90's and appreciate that they are very similar to those used in today's software. For example, this study claims to be one of the first regarding hair shape generation and it is based on a 'wisp based model'. Ultimately, today, these concepts are still present yet referred to as 'hair grooming' and 'clumping' respectively.

ART of VFX, 2016. *THE JUNGLE BOOK: ADAM VALDEZ – VFX SUPERVISOR – MPC*. [online]  
Available from: <http://www.artofvfx.com/the-jungle-book-adam-valdez-vfx-supervisor-mpc/>  
[Accessed 19 May 2017].

Webexhibits, ca.2008 [online] Available from:  
<http://www.webexhibits.org/causesofcolor/7l.html> [Accessed 19 May 2017].