

ANNOTATED REFERENCES

1. Knipping, S., 2016. *Applied Houdini - Introduction to rigid body simulation!* [video, online]. Vimeo. Available from: <https://vimeo.com/185820853> [Accessed 24.04.17].

In his two video tutorials about rigid body destructions, that I have watched Knipping explains very detailed every aspect to consider about destruction effects. He starts by explaining data structures so that someone without any knowledge learns all connections between different parts. He also mentions the general workflow several times so I could get an idea of not only that exact scenario but also how certain problems in other scenarios could get solved.

Overall he gave me the basic understanding I needed to understand the layout and workflow of destruction scenes.

2. Fiedler, S., 2016. *Prefracture transform in Houdini* [video, online]. Available from: <https://vimeo.com/176497413> [Accessed 10.05.17].

Although a relatively short video tutorial, Fiedler gave me a solution that I was searching for quite some time. I finally learned how even the edges of voronoi fractures can be adjusted and displaced so that more complex objects than for example a wall result in nice unregular shapes of fractures.

3. Seymour, M., 2011. *Art of Destruction (or Art of Blowing Crap Up)* [online]. Los Angeles: FXGuide. Available from: <https://www.fxguide.com/featured/art-of-destruction-or-art-of-blowing-crap-up/> [Accessed 05.05.17].

In his article Seymour gives a good overview over workflow and techniques that are used in the VFX industry when it comes to destruction effects. His interview with people that work in the industry also gives a good practical rather than theoretical insight on how these sort of effects can be achieved.

REFERENCES:

Bosch C. et al. 2014. *Fracture modelling in computer graphics*. In: Computers and Graphics. 45. P.86-100.

Alden, M., 2012. *Efficient and Seamless Volumetric Fracturing* [online]. DreamWorks Animation. Available from: https://research.dreamworks.com/papers/Seamless_Volumetric_Fracturing_DWA_2012.pdf [Accessed 15.05.17].

Andrew, 2016. *Houdini 15.5+ VDB Fracture with Bullet* [video, online]. Available from: <https://vimeo.com/179615190> [Accessed 20.05.17].

GoProcedural, 2017. *Launch event: Houdini 16 Amarak* [video, online]. Available from: <https://vimeo.com/203373373> [Accessed 18.05.17].

MixTraining, 2017. *LearnDay - Houdini Fracturing Basics* [video, online]. YouTube. Available from: <https://www.youtube.com/watch?v=kmNw0vnmDZw> [Accessed 10.05.17].

O'Brien JF, Bargteil AW, Hodgins JK. Graphical modelling and animation of ductile fracture. *ACM Trans Graph* 2002; 21 (3): 291–4.

Schvartzman, S. and Otaduy, M., 2014. *Fracture Animation Based on High-Dimensional Voronoi Diagrams* [online]. GMRV Publications. Available from: <http://www.gmrv.es/Publications/2014/SO14/> [Accessed 12.05.17].

SideFX, 2017. SideFX Documentation - *Shattering* [online]. Available from: <http://www.sidefx.com/docs/houdini/dyno/shatter>