

Antoine Webanck

PhD in Computer Science

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Education

- 2019 **PhD in Computer Science**, *Université Claude Bernard Lyon 1*, Lyon, France.
Subject: procedural generation of atmospheric effects
Advisors: Eric Galin and Eric Guérin
- 2015 **Master's Degree in Computer Science – Computer Graphics (Honors)**, *Université de Strasbourg*, Strasbourg, France.
- 2013 **Bachelor's Degree in Computer Science (Honors)**, *Université de Strasbourg*, Strasbourg, France.
- 2010 **Classe Préparatoire aux Grandes Écoles**, *Lycée Kléber*, Strasbourg, France.

Work experience

- 2019–... **Postdoctoral researcher**, *CNRS, LIRIS*, Lyon, France.
Theme: photorealistic rendering, sampling, and participating media
Project: ANR *Comprehensive Analysis of Light Transport Operators for image synthesis (CaLiTrOp)*
- 2018–2019 **Assistant lecturer**, *INSA*, Lyon, France.
Practical courses in Computer Science
Object Oriented Programming in C++, Advanced Algorithmics for AI and Graphs, Matrix Calculus and Rendering
- 2015–2018 **Teaching assistant**, *Université Claude Bernard Lyon 1*, Lyon, France.
Tutorials and practical courses in Computer Science
Unix, Algorithmics, Functional Programming, Programming in C, C++, Java, Scheme
- 2016–2017 **Scientific popularization**, *Children's scientific congress*.
Introducing children to research by preparing them to talk to their pairs during a scientific congress on the theme of space
- 2016 **Scientific popularization**, *Maths à Modeler*, Lyon, France.
Introduction to research in Mathematics and Theoretical Computer Science directed towards primary students

Internships

- 2015 **Research internship**, *LIGUM*, Montréal, Canada.
Six-months internship on the animation of complex volumetric scenes with the OpenGL and Cuda Gigavoxels library.
Advisors: Pierre Poulin and Pascal Schreck
- 2014 **Developer internship**, *Euro Information Développements*, Schiltigheim, France.
Three-months internship on communication with development teams to measure the impact of a new generalized parameterization tool.
- 2013 **Research internship**, *Icube laboratory*, Strasbourg, France.
Two-months internship on the development of an OpenGL application to build and subdivide curves, surfaces and volumes Box-splines.
Advisor: Dominique Bechmann

2012 **Developer internship**, *Caldera*, Eckbolsheim, France.
Three-months internship on the computation of the limits of the range of visible colors.
Advisor: Arnaud Fabre

Publications

- July 2020 Loïs Paulin, Nicolas Bonneel, David Coeurjolly, Jean-Claude Iehl, Antoine Webanck, Mathieu Desbrun, and Victor Ostromoukhov. Sliced Optimal Transport Sampling. *ACM Transactions on Graphics* 39.4 (July 2020). URL: <https://perso.liris.cnrs.fr/lpaulin/Publications/paulin2020.pdf>.
- July 2019 Antoine Webanck. Procedural generation of atmospheric effects. PhD thesis. Université de Lyon, July 2019. URL: <https://tel.archives-ouvertes.fr/tel-02454037/file/TH2019WebanckAntoine.pdf>.
- May 2018 Antoine Webanck, Yann Cortial, Eric Guérin, and Eric Galin. Procedural Cloudscapes. *Computer Graphics Forum* 37.2 (May 2018), 431–442. DOI: 10.1111/cgf.13373. URL: <https://hal.archives-ouvertes.fr/hal-01730789/file/Procedural-Cloudscapes-EG2018.pdf>.
- October 2017 Yann Cortial, Antoine Webanck, Eric Guérin, Adrien Peytavie, and Eric Galin. Modélisation procédurale de nuages multigenre. *Journées Françaises d'Informatique Graphique*. October 2017. URL: <https://hal.archives-ouvertes.fr/hal-01813228/file/Cortial2017.pdf>.

Communications

- 2018 **Presentation**, *Eurographics*, Delft, Netherlands.
Procedural Cloudscapes
- 2017 **Poster**, *Journée des Thèses (JdT)*, LIRIS.
Génération procédurale d'effets atmosphériques

Responsibilities

- 2017–2018 **PhD student representative**, *LIRIS*.
Organization of scientific junior seminars, administration of the PhD students website, participation to the laboratory council
- 2017 **Student Volunteer**, *Eurographics*, Lyon, France.
- 2016 **Reviewer**, *Journée des Thèses (JdT)*, LIRIS.

Skills

- French native speaker
English fluent
Programming C/C++, OpenGL, GLSL, Cuda, LaTeX, OCaml
Systems Linux, Windows