

EXPERIENCE

- **Research and Development Scientist** Montreal, Canada
Ubisoft La Forge December 2023 - Today
 - Define and develop research within the field of natural phenomenon modeling and physics-based animation.
 - Collaborate with team members and game production teams to develop new algorithms to generate more believable worlds, and to improve our content creation pipelines.
 - Stay up to date with the latest research in graphics and attuned to the needs of Ubisoft's productions.
- **Research and Development Developer** Montreal, Canada
Ubisoft La Forge September 2021 - December 2023
 - Build prototypes and turn them into minimal viable products for game development teams.
 - Validate research conducted in the team via technical prototyping.
 - Explore new techniques to assist artists in the digital content creation and to create more interactive worlds.
- **Ph.D. Candidate in Computer Science** Montreal, Canada / Poitiers, France
Université de Montréal / Université de Poitiers September 2016 - November 2021
 - Investigating new ways of performing efficient and intuitive art-direction over smoke, liquid and snow simulations
 - Teaching Assistant for a Computer Graphics course, supervising assignments covering many topics of CG
 - Reviewer for the Computer Graphics Forum journal and Pacific Graphics
- **Computer Graphics Research Intern** Cesson-Sévigné, France
Technicolor March 2016 - August 2016
 - Implementation of a real-time realistic sky system for VFX and animation productions
 - Procedural modelling and volumetric rendering of animated volumetric clouds
- **3D Computer Graphics Designer** Caen, France
Université de Caen April 2015 - August 2015
 - Historically accurate modelling and texturing of buildings of 1944 Caen's city for VR
- **Computer Graphics Research Intern** Montreal, Canada
Université de Montréal Mai 2015 - July 2015
 - Implementation of a real-time generation and rendering system of human body hair

EDUCATION

- **Université de Montréal / Université de Poitiers** Montreal, Canada / Poitiers, France
Ph.D., Computer Science - Thesis: Tools for Fluid Control in Computer Graphics September 2016 - November 2021
- **Institut d'Administration des Entreprises Caen** Caen, France
Master d'Administration des Entreprises, General Management September 2014 - August 2016
- **Ecole Nationale Supérieure d'Ingénieurs de Caen** Caen, France
Diplôme d'Ingénieur (Master of Science in Engineering), Computer Science September 2013 - August 2016
- **CPGE (Higher school preparatory classes) Saint-joseph** La Roche-sur-Yon, France
Concours Communs Polytechniques, Mathematics and Physics speciality September 2011 - August 2013

PUBLICATIONS

- Lutz N., **Schoentgen A.**, Gilet G., Fast Orientable Aperiodic Ocean Synthesis using Tiling and Blending, High-Performance Graphics, 2024
- Rabbani A.H., Guertin J.P., Rioux-Lavoie D., **Schoentgen A.**, Tong K., Sirois-Vigneux A., Nowrouzezahrai D., Compact Poisson Filters for Fast Fluid Simulation, ACM SIGGRAPH 2022 Conference Proceedings, 2022
- **Schoentgen A.**, Tools for Fluid Simulation Control in Computer Graphics, 2021
- **Schoentgen A.**, Zehnder J., Poulin P., Thomaszewski B. Meseure P. and Darles E., A Density-Accurate Tracking Solution for Smoke Upresolution, The Visual Computer, 2020
- **Schoentgen A.**, Poulin P., Darles E. and Meseure P., Particle-based Liquid Control using Animation Templates, ACM SIGGRAPH / Eurographics Symposium on Computer Animation, 2020

SKILLS

- **Programming Languages:** C++, C, DX12, HLSL, OpenGL, GLSL, OpenMP, Python, Java
- **Tools and Softwares:** 3ds Max, Houdini, MATLAB, Git
- **Development Environments:** Visual Studio, QT Creator, Eclipse

VOLUNTEERING

- Board Member, Montréal ACM SIGGRAPH, 2023 - Today
- President and Founder of the Club3D, Ecole Nationale Supérieure d'Ingénieurs de Caen, 2013 - 2015
- Communication Manager at the Arts Office, Ecole Nationale Supérieure d'Ingénieurs de Caen, 2013 - 2014