

# Victor Petitjean

Haagweg 149B  
2281AH Rijswijk, The Netherlands  
☎ +31 6 14 83 76 82  
✉ [petitjean.victor@gmail.com](mailto:petitjean.victor@gmail.com)  
📄 [linkedin.com/in/victorpetitjean](https://www.linkedin.com/in/victorpetitjean)  
🇫🇷 French citizenship



## Summary

**Computer Graphics engineer with 4+ years of experience in research, with proficient team communication and methodical organization. I have a Master of Science in Engineering and I applied my knowledge in renowned universities and companies worldwide. I am seeking to apply my graphics knowledge and structured methodology in closer partnership with creative minds.**

## Experience

### Vocational

- from **Simulation Engineer in Computer Graphics**, *Siemens*, The Hague, Netherlands.
- Sep 2019 Developed a physically-based path tracer for automotive camera and lidar simulation, and validated our simulation in collaboration with a lidar manufacturer.
- Object-oriented programming in C++11 and OptiX, scripting and prototyping in Python and Matlab.
  - Collaboration between team members and commercial partners for cooperative and efficient teamwork.
- Nov 2016 **Research Assistant in Computer Graphics**, *Delft University of Technology*, Delft, Netherlands.
- Mar 2019 Conducted research in computer graphics under the supervision of Prof. Dr. Eisemann (path tracing, importance sampling, spectral rendering). Published four papers and gave talks at international conferences.
- Didactic Teaching Assistant to Bachelor students, in Rendering 101.
  - Ability to conceptualize problems and develop well-reasoned and innovative solutions.
- Feb–Aug 2016 **Intern Researcher in Computer Graphics**, *Technicolor*, Rennes, France.
- Developed new techniques for real-time 3D rendering using area light sources. Best intern award.
- Jun–Aug 2015 **Intern Researcher in Biomedical Optics**, *Stanford University*, Palo Alto, CA, USA.
- Collaborated with Prof. Bowden's team to develop innovative biomedical imaging technologies.

### Miscellaneous

- 2016 **Volunteer**, *Le Refuge*, Rennes, France.
- Volunteered at *Le Refuge*, a nonprofit that shelters young adults victims of LGBTQ-phobia in their family.
- 2014 **Students council member, in charge of the AV club**, *Institut d'Optique*, Palaiseau, France.
- Led the AV club, directed and edited shorts and video recaps about our school's artistic events.

## Education

- 2013–2016 **Master of Science in Engineering**, *Institut d'Optique*, Bordeaux, France (3.86 GPA).
- Coursework includes: Computer Science, Computer Graphics, Computer Vision, Image Processing, Physical and Geometrical Optics, Technologies of Screens and Displays, Electronics, Signal Processing.

## Language and Computer skills

French Native speaker  
English Fluent (*TOEIC score 990/990*)  
Dutch Elementary  
German Elementary

Languages C/C++, Python, Matlab  
Graphics OptiX, GLSL, Blender, Maya  
Office tools Windows & Linux, Microsoft 365,  $\text{\LaTeX}$   
Hobbies Cinema, LEGO building, world traveling

## Publications

- 2019 A Survey on Gradient-Domain Rendering.  
B.-S. Hua, A. Gruson, **V. Petitjean**, M. Zwicker, D. Nowrouzezahrai, E. Eisemann, T. Hachisuka.  
In *Computer Graphics Forum (State of the art report – Eurographics 2019)*.
- 2018 Spectral Gradient Sampling for Path Tracing.  
**V. Petitjean**, P. Bauszat, E. Eisemann.  
In *Computer Graphics Forum (Proceedings of EGSR 2018)*.
- 2018 Applying Visual Analytics to Physically-Based Rendering.  
G. Simons, S. Herholz, **V. Petitjean**, T. Rapp, M. Ament, H. Lensch, C. Dachsbacher, M. Eisemann, E. Eisemann.  
In *Computer Graphics Forum*.
- 2017 Gradient-Domain Path Reusing.  
P. Bauszat, **V. Petitjean**, E. Eisemann.  
In *ACM Transactions on Graphics (Proceedings of SIGGRAPH Asia 2017)*.

## Conference Participations

- 2018 Spectral Gradient Sampling for Path Tracing. Eurographics Symposium on Rendering 2018. Karlsruhe, Germany. July 2-4.
- 2018 *Conference co-organization*. Eurographics 2018. Delft, The Netherlands. April 16-20.
- 2017 Gradient-Domain Path Reusing. SIGGRAPH Asia 2017. Bangkok, Thailand. November 27-30.