



# Vincent Tavernier

*Systems and computer  
graphics engineer*

Grenoble

✉ [vince.tavernier@gmail.com](mailto:vince.tavernier@gmail.com)

📄 [vtavernier.github.io](https://vtavernier.github.io)

## Academic and professional experience

### Postgraduate education – Université Grenoble Alpes

2020 – 2021 **Temporary Lecturer and Research Assistant.**

*Summary:* Teaching at university and continuing Ph.D preparation (see below).

*Teaching:* Advanced databases (9h) — Relational databases and applications (84h) — Software development basics: modularization, tests (67.5h) — Automata and languages (30h)

2017 – 2020 **Ph.D preparation: controlling the appearance of stochastic procedural textures.**

*Summary:* Development of optimized procedural texture generation methods and applications in additive manufacturing.

*Responsibilities:* System administration of the team's computers — Participation in technical and scientific presentations — Organization of the annual team seminar

*Technologies:* Rust, C++17, CMake, OpenGL 4, CUDA, Julia, Mathematica, Ansible, Docker

*Teaching:* Software architecture (41h) — Advanced databases (26h) — Algorithms and imperative programming (80h)

### Graduate education – Grenoble INP – Ensimag

2014 – 2017 **Engineering diploma in applied mathematics and computer science.**

Information systems engineering major

2017 **Master internship: Studying artifacts arising from procedural textures given paradoxical requirements.**

LABORATOIRE JEAN KUNTZMANN — MAVERICK TEAM

*Summary:* Study of the properties and resulting artifacts of various procedural texturing methods under paradoxical requirements.

*Technologies:* C++14, CMake, OpenGL 4

Summer 2016 **Engineering internship: Translation system for software products.**

EATON

*Summary:* Evaluation and setup of a new translation management solution. Integration of the new solution into existing projects.

*Technologies:* Python, SQL, Perl, JavaScript

2016 **Introduction to do research: Rendering mountain panoramas.**

LABORATOIRE D'INFORMATIQUE DE GRENOBLE – IIHM TEAM

*Summary:* Implementation of a texture mapping system for a research project about digitally rendering mountain panoramas in the style of Pierre Novat.

*Technologies:* Python, OpenGL

### Undergraduate education

2012 – 2014 **PTSI Preparatory class, Lycée Rouvière.**

## Skills

Languages	French (native), English (fluent, TOEFL iBT score: 106/120)
Programming languages	Rust, C, C++17, GLSL, Python, Julia, Mathematica, CMake, Make, Bash, Perl, Sed, AWK, SQL, Ruby, JavaScript, TypeScript, C#, Java, Ada
Software	Version control systems (Git) — GPU (CUDA) and real-time computing, optimization (measuring, profiling, cache, etc.) — Graphical APIs (OpenGL 4) — Distributed computing (OpenMPI) — Operating systems (Linux, Windows) — Testing and validation (unit, integration, fuzzing, coverage, etc.) — Continuous integration (GitLab CI, GitHub Actions, etc.) — System administration and deployment (Ansible, Docker, Linux, Cloud, Networks, Virtualization, Debian packaging etc.) — Open-source development model and licences

## Publications

### International conference with review committee

- 2020 **Freely orientable microstructures for designing deformable 3D prints.**  
*SIGGRAPH Asia 2020 – ACM Transactions on Graphics*  
Thibault TRICARD, Vincent TAVERNIER, Cédric ZANNI, Jonàs MARTÍNEZ, Pierre-Alexandre HUGRON, Fabrice NEYRET, Sylvain LEFEBVRE  
<https://hal.inria.fr/hal-02524371v3>
- 2019 **Making Gabor Noise Fast and Normalized.**  
*Eurographics Short Papers*  
Vincent TAVERNIER, Fabrice NEYRET, Romain VERGNE, Joëlle THOLLOT  
<https://hal.inria.fr/hal-02104389>

### National conference

- 2018 **Gabor Noise Revisited.**  
*j-FIG - Journées Françaises d'Informatique Graphique*  
Vincent TAVERNIER, Fabrice NEYRET, Romain VERGNE, Joëlle THOLLOT  
<https://hal.archives-ouvertes.fr/hal-01926451>

## Training courses attended

Technical	<b>Introduction to parallel computing</b> , 36h. Notions in distributed computing, OpenMPI, OpenMP and datacenters. <b>Introduction to the Julia language</b> , 8h. Getting started with Julia for scientific computing.
Pedagogy	<b>Managing student behavior in class</b> , 21h. Relation between pedagogy and behavior, methods in class management.

## Personal projects

- Since 2021 **Writing articles for my blog**, *Topics: programming, electronics, etc..*  
<https://vtavernier.github.io/posts/>
- Since 2020 **glsIt**, *Function template compiler for GLSL.*  
<https://github.com/vtavernier/glsIt>
- Since 2020 **glsI-lang**, *LALR parser for GLSL.*  
<https://github.com/vtavernier/glsI-lang>
- And many others: <https://vtavernier.github.io/projects/>