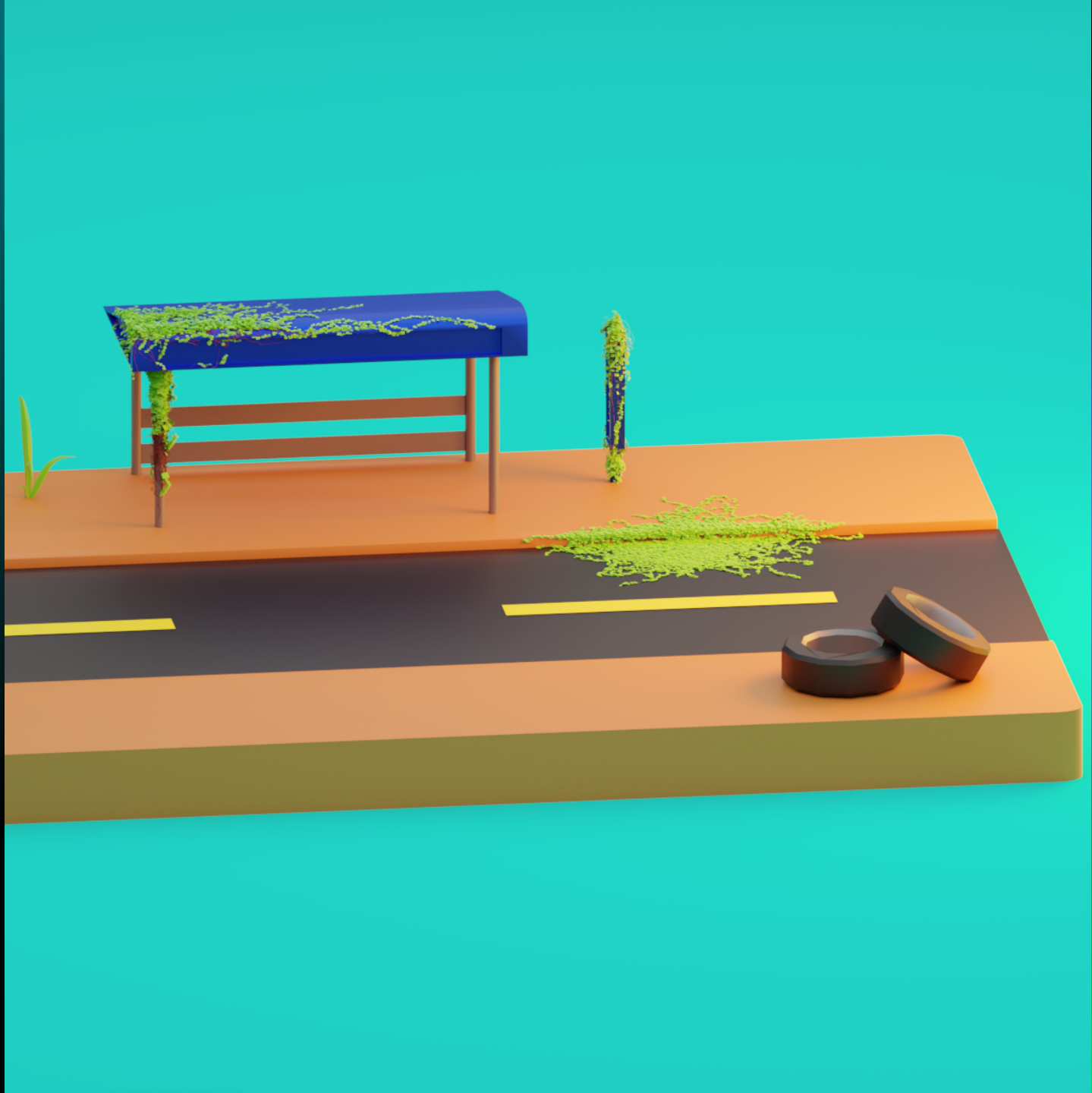


# RABEFANIRAKA Yan

COMPUTER GRAPHICS RESEARCHER



# Computer Science Researcher



## 1. Explore computing needs and requirements, and determine novel solutions

A researcher uses their field knowledge and curiosity to understand the domain's current needs. They will develop models theories, or algorithms as new solutions to address the need.

## 2. Experiment and evaluate

To measure the impact of their newfound solution, they may test its limits, evaluate its pros and cons, and compare its performances to other proposed solutions so that their peers can better understand its use cases.



## 3. Publish results and work internationally

A researcher collaborates with other scientists and engineers. Thus, writing papers for publication and presenting the result at conferences ensures that the novel solution can be used by everyone in the field.



# Why it fits my profile



## Hard skills

- Applied mathematics
- 3D software knowledge (*Blender, Fusion360, Slicers*)
- Programming skills, including some in the field (for e.g. *GCODE*)
- Proficient writing skills (including in English)
- General knowledge of technologies



## Soft skills

- Curiosity
- Adaptability
- Problem Solving
- Creativity
- Teamwork



## Evolution

- Team's lead researcher
- Research awards or grants

# Alternative paths



## Video games graphics programmer

- Develop suitable solutions for the team's artists, so that their workflow matches their objectives.
- Help the design group implement gameplay mechanics.
- Large field with many opportunities especially in France, in Video games as well as in Animation.



## Computer Science in Agricultural engineering

- Deploy solutions to help agricultural engineers at maintaining and growing crops.
- Many direct applications of computer graphics such as satellite image evaluation of crop growth
- Agricultural labs such as INRAE often need such skills.

# Academic roadmap

## 2A SN: Imagery and Multimedia

Audiovisual Data processing, 2D/3D Modeling and Rendering, Computer Graphics

→ Currently looking for an **international internship**: some labs in Oxford, UK have really interesting research subjects.

## 3A SN: Expected mobility in the University of Stavanger, Norway

Courses in 3D printing and additive manufacturing, 3D Modeling and Rendering, Digital twins

## 3. Post SN: Thesis ?

Expected thesis in Computer Graphics, 3D rendering and specifically in 3D printing. Maybe here at IRIT or at INRIA Grenoble/Nancy where they have amazing breakthroughs in 3D rendering/printing.

IRIT

Inria

US

# Civic Engagements



**7Voix:** Vice-president, help organising choir sessions and administrate the club



**net7:** New member, Took part in the *Capitole du Libre* and *Nuit de l'Info* events



**Photo7:** Vice-president, manage photographs' timetables during school events and outside gigs.



**Ac7pt:** Secretary, make minutes of our meetings and organise them.



# Thanks for listening !

- <https://www.bls.gov/ooh/computer-and-information-technology/computer-and-information-research-scientists.htm#tab-2>
- <https://cs.unc.edu/research/areas/computer-graphics/>
- <https://www.antexel.com/sylefeb/research>
- [https://www.mdpi.com/journal/applsci/special\\_issues/Computer\\_Agricultural](https://www.mdpi.com/journal/applsci/special_issues/Computer_Agricultural)