Sarah Frémann I Developer I Programmer

sarah.fremann -at- gmail.com I in linkedin.com/in/sarah-fremann sfremann.github.io/portfolio I github.com/sfremann

Developer with a strong background in computer science and mathematics, willing to contribute to high-quality games with compelling storytelling and fun gameplay.

Work experience

Researcher in Applied Computer Science (focus on HCI, XR, CG)

10/2024 - present

Diepenbeek - BE

Hasselt University - Digital Future Lab

- Built a collaborative XR environment for editing scenes on multiple devices.
- o Enabled BIM annotation in XR with Uls, and automation tools in Python.
- Prepared, together with a game studio, a project proposal on branching narrative authoring and error detection tools for complex game productions.
 - UE5, C++, Python, Unity, C#, Blender.

VR Developer Intern

02/2024 - 08/2024

Hasselt University - Digital Future Lab

Diepenbeek - BE

- Designed and implemented Unreal Engine demonstrators to evaluate the impact of haptic feedback and VR on consumer behaviour in online purchasing.
- Streamlined a large-scale study (150+ participants) with automation tools.
 - UE5, C++, Python, Unity, C#, ShaderLab, Blender.

Other projects

UE5 Dialogue Graph Plugin | WIP

05/2024 - present

- Designed and implemented a custom dialogue asset and its graph editor.
- o Enabled multi-environment collaboration with XML import-export scripts.
- Streamlined the creation of story flag assets (key events) with a custom editor that can safely create, import, export, update and move flags.
- o Created a WPF tool to edit flags, and other XML files, outside of Unreal.
- Implemented a dialogue manager for playing dialogues in-game.
 - UE5, C++, Python, WPF, C#

Traummacher & Träumer - narrative games

09/2023 - 12/2023

- Co-wrote the story, branching narrative and technical documentation.
- o Implemented environment mechanics, VFX, light and camera effects.
- Handled art direction, integration and shipping.
 - Unity, C#, ShaderLab, Ink, Blender

Education

Ingénieure en génie informatique (Eq. MSc in Computer Science)

2024

UTC - Alliance Sorbonne Université (Université de Technologie de Compiègne)

Compiègne - FR

Prépa Animation (1-year intensive course to prepare a computer animation portfolio) *Atelier de Sèvres*

Paris - FR

2019

Interests

 $\textbf{Music:}\ piano,\ cello,\ composition,\ or chestra\ conducting.$

Storytelling: writing, drawing, game development.

Spectacle: dance, drama acting, in clubs.

Spoken Languages

Fluent: French, English. Intermediate: Spanish.

Basic: Dutch, German, Japanese.