# Elvio Santangelo

https://darakuu.github.io Catania, Italy

### ABOUT ME

I'm a Game Developer with a jack-of-all-trades skillset, but with particular focus on Gameplay Programming, Level Design, and Artificial Intelligence. I'm extremely motivated to pursue a career opportunity in the field I love. I approach every problem with the expectation to find a solution.

## SKILLS

Programming Languages: Bash, C, C++, C#, CUDA, JavaScript, OpenCL, Python, TypeScript,

Technologies: Audacity, Blender, Blueprints, Docker, Git, Git-Fork, Godot, HTML/CSS, Jira, JetBrains Suite, Linux, Markdown, Miro, MySQL, Node.js, Source Engine, Steamworks SDK, Trello, Unreal Engine 5, VS, VSCode

Miscellaneous: Strong problem-solving skills, effective team collaboration, and high self-organization in remote work environments.

Languages: Italian (Native), English (Fluent)

#### Professional Experience

# C++ Gameplay Programmer, Level Designer

 ${\bf Bevium~SRL}$ 

 $Full\ Remote$ 

- Feb 2024 Ongoing
  - Gameplay Programmer in C++, using Unreal Engine 5, with a generalist approach to Game Development.

    Deep understanding of the UE5 Reflection system, replication, multiplayer game development, and Gameplay Framework
  - Responsible for the implementation of the AI behavior in our projects, creation of internal C++ systems, designer-focused Blueprint Systems, custom build systems using UBT and UAT, and level design.
  - Handling of internal project-management, tasks and onboarding.

#### EDUCATION

## University of Catania — MSc in Computer Science

Oct 2023 - Ongoing

#### University of Catania — BSc in Computer Science

Oct 2017 - Apr 2023

#### Projects

- Arcas Champions: (Feb 2024 Ongoing) Competitive multiplayer third-person shooter; implemented player and enemy AI agents, core C++ and Blueprint systems, and custom UBT/UAT build pipelines; led level design from grayboxing through final polish; managed Kanban workflows and Git version control. Handled the deployment of the game on Steamworks.
- LIS Project CNN Model: (Jul 2024) I implemented a CNN model to recognize the LIS sign-language alphabet by designing custom and AlexNet-based architectures, training them on MNIST and custom-acquired datasets, and building a data-acquisition and engineering pipeline.
  - Technologies used: Python, PyTorch, OpenCV2, Torchvision, TensorBoard, NumPy.
- Multimedia VectorView Video Motion Field Visualizer : (May 2024) I created a Python application that computes and overlays video motion fields using EBMA and Three-Step Search (with MSE/MAD) and tracks user-defined ROIs via Oriented FAST, Rotated BRIEF, and a Multiple-Instance Learning tracker, all wrapped in a PyQt5 GUI.
  - Technologies used: Python, OpenCV, Pillow, NumPy, PyQt5
- Interloping Habitat Black Mesa Mod: (Jul 2021) I built a complete Source Engine level mod from grayboxing through final polish, crafting layouts and the overall experience, as well as the new features present in the Black Mesa engine branch.
  - Technologies used: Source Engine, Hammer Map Editor, Miro
- Black Mesa Italian Translation and Proofreading: (Sept 2020) I served as the Crowbar Collective's official Italian translator and proofreader, localizing and QA'ing in-game dialogue, HUD, and menu strings via XML datasets. Technologies used: CrowdIn, XML localization

#### Hobbies