My project is called The RCA Capture Card & Converter, an open source capture card built for the Nintendo Wii and other RCA-based consoles. It is similar to capture cards used for the Nintendo Switch, however, it is open source alternative and takes different inputs.

This project is primarily for people who already have a console with RCA outputs.

This is an alternative to running the software on emulators, as it would allow the streamers and individuals to use the hardware they already have, especially motion controls for the Wii

Its core feature is converting an RCA output from the console to an USB input, while still providing access to the original output.

I plan to use an FPGA to continuously convert the inputs to the desired outputs.

The aesthetic theme will be minimalistic white design to match the look of most Wiis.

The device will split an RCA input from a device. One prong going to the typical output device, such as a TV, via either HDMI or RCA. The other prong will be converted to USB and sent to the connected computer.

- 1. One-Line (Elevator) Pitch: A single sentence that summarizes the project concept and what makes it unique.
  - a. An open source capture card built for the Nintendo Wii and other RCA-based consoles.
- 2. Working Name: Working title for the project (which may be changed later)
  - a. RCA Capture Card
- 3. Audience: Description and justification for the project's target user group

- a. The target audience for this project is primarily streamers and individuals who already have a Nintendo Wii or other console with RCA outputs.
- b. It is intended to be a more versatile device than the ones currently available, as most development focuses on HDMI capture cards.
- 4. Use-Case Story: Description of the "story" concept for the proposed project (e.g., an example use-case)
  - a. This device would be an open source alternative to running the software on emulators, as it would allow the user to use the hardware they already have. It also offers a higher-quality alternative to recording the monitor externally.
- 5. Core Feature(s): Explanation of feature(s) fundamental to the project's primary function
  - a. RCA input
  - b. USB output of data to a computer
  - c. Output to standard display (such as a TV) in either RCA or HDMI
  - d. Open source
  - e. Stretch goal
    - i. Also supporting HDMI input
- **6**. Technology Platform: Description of the target platform (FPGA, mobile, PC, custom, other)
  - a.
  - b.
  - c. Plan is to use an FPGA or microprocessor?
- 7. Aesthetic Theme: Description of the key aesthetic elements of the project (includes hardware projects!)
  - a. Minimalistic white design to match the look of most Wiis
- 8. Summary
  - a. The device will take input from the device via a set of RCA cables and split that input. One prong will go to the typical output device, such as a TV, via either HDMI or RCA. The other prong will be converted to USB and send the data to the connected computer, for use in streaming or recording.