

CASVIAI: How It Works (Detailed Workflow)

This document explains the detailed workflow of CASVIAI, the AI-powered platform that transforms research papers into narrated video podcasts. Each step highlights the technical process, expected outcomes, and the responsible team roles.

Step 1: Upload or Link Research Paper

Users upload a PDF or share a link to their research papers, theses, or dissertations. CASVIAI's AI engine scans and parses the document, extracting structure, context, and terminology using NLP and domain-trained AI models.

Outcome: The paper is digitized into structured data for podcast creation.

Responsible Team: AI Engineering & Data Processing Team.

Step 2: AI Understanding & Structuring

CASVIAI analyzes the uploaded content to identify abstract, introduction, methods, results, and discussion. It also detects field-specific jargon and adapts tone and visuals to the research domain.

Outcome: A context-aware script outline ready for podcast narration.

Responsible Team: AI/NLP Specialists + Subject Matter Consultants.

Step 3: AI Podcast Creation

The structured research is converted into a podcast-style script. Two AI narrators (anchor + guest) are auto-generated, simulating a natural conversation that explains the research clearly and engagingly.

Outcome: Draft podcast script ready for narration.

Responsible Team: Content Engineering + AI Voice & Avatar Team.

Step 4: Avatar & Voice Synthesis

Avatars are created through real-human motion capture or user profile auto-generation. The voices are AI-synthesized, customizable by gender, tone, and style. New avatars are released monthly and users can choose their preferred style.

Outcome: Realistic, human-like presenters for each podcast.

Responsible Team: Avatar Creation Team (3D Artists + Motion Capture) + AI Voice Engineering Team.

Step 5: AI Video Podcast Rendering

CASVIAI integrates script, avatars, voices, and animations into a video format. Visuals adapt automatically to enhance clarity (e.g., diagrams, highlights, charts).

Outcome: Final narrated video podcast in MP4 format, ready to stream or download.

Responsible Team: Video Rendering Team + UX/UI Designers.

Step 6: Distribution & Sharing

The finished podcast can be embedded on websites, shared on social media, or distributed via CASVIAI's global library. Trending podcasts are ranked weekly, monthly, and yearly.

Outcome: Wider visibility and engagement across academia and industry.

Responsible Team: Marketing & Distribution Team.

Step 7: Collaboration & Market Insights

CASVIAI recommends grants, collaborators, and institutions based on each paper's topic. Built-in AI market analysis highlights countries, industries, and funding calls relevant to the research.

Outcome: Collaboration opportunities + market validation insights.

Responsible Team: AI Research Matching Team + Business Development.

This workflow demonstrates how CASVIAI integrates AI, content creation, and academic collaboration to transform research into globally accessible knowledge.