

Video

- signals: VideoSignals
- control_signals: ControlSignals
- __frame_count: int
- __frame_rate: int
- dims: Tuple[int, int, int]
- __stop_flag: bool
- __current_frame: Frame
- __cap: cv2.VideoCapture
- __path: str
- __output_path: str
- __detector: PoseDetector
- __marker_overlay: bool
- __save_filter_output: bool
- __show_velocity_vectors: bool
- __frame_buffer: FrameBuffer
- __video_completed: threading.Event
- abort: SharedBool
- __filter: Filter
- __playback: bool

- + __init__(path: str, abort: SharedBool)
- + terminate()
- + set_analysis_overlay(as_overlay: bool)
- + set_filter_output(output: bool)
- + set_velocity_vectors(show_vectors: bool)
- + export_frame(path: str)
- + __ground_contact(prev_foot_pos, curr_foot_pos)
- + __open(path: str)
- + play(frame_index: int)
- + rewind()
- + forward()
- + toggle()
- + pause()
- + stop()
- + jump_to_frame(frame: int)
- + __read_video_file()
- + set_filter(filter: Filter)
- + set_eval_type(eval_type: EvalType)
- + __perform_pose_detection()
- + update_progress(current_progress: int)
- + run()
- + get_filename() -> str
- + get_path() -> str
- + get_base_path() -> str
- + get_analysis_path() -> str
- + get_output_path() -> str
- + show_vector(start_point: np.ndarray, vec: np.ndarray, color: tuple, scale: float)
- + show_hip_vector(frame_index: int, vector: np.ndarray, color: tuple)
- + angle(vec1: np.ndarray, vec2: np.ndarray) -> float
- + takeoff_angle(hip_pos: np.ndarray, takeoff_index: int) -> float
- + regressions(hip_height: np.ndarray, knee_angles: np.ndarray, full: bool) -> Tuple[int, int] or Tuple[int, np.ndarray]
- + takeoff_frame(hip_height: np.ndarray, knee_angles: np.ndarray, full: bool) -> Tuple[int, int] or int
- + set_control_signals(control_signals: ControlSignals)