«Script» Control Master + conf: ConfigParser + __init__(self, app: Flask) -> None + app: Flask + start(self) + control: Control + search_cameras(self, send_search: bool = True) -> None + capture_photo(self, action: Literal['photo', 'stack'] = "photo", + static file(filename: PathLike[str] | str) -> Response + sync exposure(self) + send_to_desktop(self, message: str) -> None + index() -> str + time(time: int) -> str + send to all(self, msg str: str) -> None + overviewZip() -> str + found_camera(self, hostname: str, ip: str) -> None + usb_copy(filename: str) -> str + receive_photo(self, ip: str, id_lens: str, filename: str) -> None + overview() -> str + all_images_downloaded(self, id, folder) + search html() -> str + zip and send folder(self, id, folder) + check_and_copy_usb(self, file) + photo_html(id: str = "") -> str + stack html(id: str = "") -> str + find aruco(self) + receive aruco(self, data: str) -> None + capture html(action: + set_marker_from_csv(self, file, save=True) -> None Literal['photo', 'stack'] = "photo", id: str = "") -> str + switch_pause_resume(self,) + pause(self,) + preview() -> str + focus(val: float = -1) -> str + resume(self,) + shutdown_html() -> NoReturn + set_time(self, time: int) -> str + reboot_html() -> NoReturn + system_control(self, action: Literal['shutdown', 'reboot']) -> NoReturn + update(self,) + restart() -> str + pause() -> str + restart(self,) + set config from web(self, config: dict) -> None + resume() -> str + proxy(host: str, path: str) -> bytes + get_config_for_web(self,) -> dict + get_hostnames(self,) -> dict[str, str] + update() -> str + get_cams_started(self) -> bool + aruco() -> str + get leds(self) -> LedControl + aruco_erg() -> str + test() -> str + get_marker(self) + photo light html(val: int = 0) -> str + is_system_stopping(self) + status_led_html(val: int = 0) -> str + get_cameras(self) + marker_get() -> str + get_detected_markers(self) + marker_post() + config_get() -> str + config_post() -> str **ButtonControl** LedControl + __init__(self, control: 'Control') + switch off(self)

+ starting(self)
+ waiting(self)

+ running_light(self)

+ get_photo_light_color(self)

+ set_photo_light_color(self, color)

+ status_led(self, val: float = 0) -> None + photo_light(self, val: float = 0) -> None

CameraControlThread StoppableThread __init___(self, *args, **kwargs) _init__(self, control: Control) stop(self) run(self) stopped(self): boolean DesktopControlThread init (self, control: Control) run(self) MarkerCheck + __init__(self, marker_coords: dict[int, ArucoMarkerCorners], marker pos: dict[str, list[ArucoMarkerPos]], metadata: dict[str, Metadata], cameras: d+ CameraExterior] = {}) + check(self) -> None + recalculate_coordinates(self, cameras: dict[str, dict[str, np.ndarray]], t: pd.DataFrame) -> bool + get corrected coordinates(self) -> dict[int, ArucoMarkerCorners]

FocusStack

- + findHomography(image_1_kp, image_2_kp, matches) -> npt.NDArray[np.float32]
- + align_images(images: list[npt.NDArray[np.uint8]]) -> list[npt.NDArray[np.uint8]]
- + doLap(image: npt.NDArray[np.uint8]) -> npt.NDArray[np.uint8]

+ get_filtered_positions(self) -> dict[str, list[ArucoMarkerPos]]

+ rotationMatrixToEuler(self, R: np.ndarray) -> np.ndarray

+ get_cameras(self) -> dict[str, CameraExterior]

+ isRotationMatrix(self, R: np.ndarray) -> bool

+ focus_stack(unimages: list[npt.NDArray[np.uint8]]) -> npt.NDArray[np.uint8]