

Job
delivery withdrawal
explode() get_delivery() get_withdrawal() set_delivery(delivery) set_withdrawal(withdrawal)

JobDecoder
object_hook(o)

JobEncoder
default(o)

Node
calculator counter : int is_active : bool lock : lock node_id : NoneType nodes_list : dict server_host server_port shutdown_flag : bool truck wave_id : NoneType wave_weight : NoneType
greetings() handle_greeting(message) handle_greeting_response(response) handle_initialize_response(response) handle_job(message) handle_message(client_socket) handle_wave(message) initialize() send_message(target_ip, message_type, payload) shutdown() start() take_job() wave(wave_weight)

Plotter
ax fig graph
get_graph() get_route_list(routes) plot_routes(routes) position_color_size(position) set_graph(graph) update_plot(routes)

RouteList
stop_list : NoneType, list
append_from_job(job) append_stop_to_list(stop) delete_by_id(job_id, withdrawal) get_stop_list() get_stop_list_as_dict() set_stop_list(stop_list)

RoutesCalculator
graph : MultiDiGraph k : int truck
ant_col_alg() calculate_distance(ant_path, graph) coord_to_nodes(stop_list) generate_weight_matrix(route_list) get_graph() get_k() select_next_node(route_list, current_node, visited_nodes, pheromone, graph, alpha, beta, epsilon) set_graph(graph) set_k(k) shortest_deviation(route_list, new_job, path)

Server
host interval : int jobs : list lock : lock node_count : int nodes : dict port server_socket : socket timer : NoneType, Timer
handle_client(client_socket, address) send_dummy_job() send_job(target_ip, job) send_job_request(job) start() start_job_timer() stop_job_timer()

Stop
delivery_id latitude longitude priority time_of_request withdrawal
get_delivery_id() get_latitude() get_longitude() get_priority() get_time_of_request() is_withdrawal() set_delivery_id(delivery_id) set_latitude(latitude) set_longitude(longitude) set_priority(priority) set_time_of_request(time_of_request) set_withdrawal(withdrawal)

StopDecoder
object_hook(o)

StopEncoder
default(o)

Truck
actual_position : NoneType available energy last_time_info : NoneType loading_space loading_space_left node_route : NoneType path : NoneType route_list starting_point
append_to_stop_list(stop) append_to_stop_list_from_job(new_job) dummy_route(num, min_lat, max_lat, min_lon, max_lon) get_actual_position() get_energy() get_last_time_info() get_loading_space() get_loading_space_left() get_node_route() get_path() get_route_list() get_starting_point() is_available() print_status() recalculate_route(new_job) set_actual_position(actual_position) set_available(available) set_energy(energy) set_last_time_info(last_time_info) set_loading_space(loading_space) set_loading_space_left(loading_space_left) set_node_route(node_route) set_path(path) set_route_list(route_list) set_starting_point(starting_point) update_status()