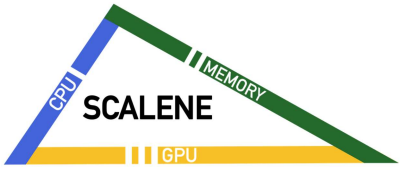

▶ advanced options

Time: Python | native | system

hover over bars to see breakdowns; click on COLUMN HEADERS to sort.

show all | hide all | only display profiled lines ☑

▼C:\Users\bapti\gitClone\Project-AI-EA\python_implem\python\EA.py: % of time = 100.0% (24m:8.411s) out of 24m:8.411s.

TIME	GPU util.	GPU memory	LINE PROFILE *(click to reset order)* C:\Users\bapti\gitClone\Project-AI-EA\python_implem\python\EA.py
			6 import numpy as np
			7 import pandas as pd
			9 from tqdm import tqdm
			12 import matplotlib.pyplot as plt
			13 import folium
			60 def __init__(
			72 np.random.shuffle(self.path)
			74 def evaluate(self, D):
			76 city_indices = np.array(self.path)
			77 next_city_indices = np.roll(city_indices, shift=-1)
			81 total_distance = np.sum(distances)
			88 i, j = random.choices(range(self.n), k=2)
			93 def crossover(self, other):
			95 start, end = sorted(random.choices(range(self.n), k=2))
			102 for city in other.path:
			103 if city not in segment:
			107 return individual(n_cities=self.n, fixed=newborn_path)
			292 fitnesses = [compute_fitness(ind, distance_matrix) for ind in individuals]
			296 selected_parents = np.random.choice(individuals, size=n_individuals, p=probabilities)
			302 parent1, parent2 = random.choices(selected_parents, k=2)
			303 child1 = parent1.crossover(parent2)
			304 child2 = parent2.crossover(parent1)
			305 offspring.extend([child1, child2])

Scalene version 1.5.31.1, released 2023.09.15 | share your Scalene success stories

			312 for _ in range(n_genes_to_mutate):
			313 individual_to_mutate.mutate()
			316 best_parent = individuals[np.argmax(probabilities)]
			317 individuals = np.concatenate([[best_parent], offspring, selected_parents])
			362 unique_individuals = set(tuple(ind.path) for ind in individuals)
			369 for ind in individuals:
			370 for i in range(len(ind.path) - subpathlength+1):
			371 patterns.append(tuple(ind.path[i:i+subpathlength]))
			372 num_shared_patterns = len(patterns) - len(set(patterns))

TIME	GPU util.	GPU memory	LINE PROFILE *(click to reset order)* C:\Users\bapti\gitClone\Project-AI-EA\python_implem\python\EA.py	
			380	'Number of Individuals': len(individuals),
			389	'Median':np.median(scores),
			390	'Q1':np.quantile(scores, 0.25),
			391	'Q3':np.quantile(scores, 0.75),
			394	df = df._append(new_row, ignore_index=True)
			400	def append_to_csv(filename, data):
			425	with open(filename, mode='a', newline='') as file:
			430	if file.tell() == 0:
			434	writer.writerow(data)
			500	lat2 = df["lat"].iloc[j]
			504	lng2 = df["lng"].iloc[j]
			508	a = np.sin(dphi/2)**2 + np.cos(phi1)*np.cos(phi2)*np.sin(dtht/2)**2
			509	c = 2*np.arctan2(np.sqrt(a), np.sqrt(1-a))
			559	for i in tqdm(range(max_iterations)):
			563	current_score = statistics_df.iloc[-1]['Score']
			573	if no_improvement_counter >= early_stopping_rounds:
			590	number_of_same_individuals = statistics_df['Number of Same Individuals'].iloc[-1]
			600	if statistics_df['Q3'].iloc[-1]<2*statistics_df['Q1'].iloc[-1]:
			703	french_cities = pd.read_json(french_cities_path)
			745	print('Saving results')

TIME	GPU util.	GPU memory	FUNCTION PROFILE *(click to reset order)* C:\Users\bapti\gitClone\Project-AI-EA\python_implem\python\EA.py	
			60	individual.__init__
			74	individual.evaluate
			87	individual.mutate
			93	individual.crossover
			264	Scalene.epoch
			322	Scalene.update_statistics
			400	Scalene.append_to_csv
			464	Scalene.compute_spherical_D
			515	Scalene.train