

# ПРИЛОЖЕНИЕ А

Таблица 1 — Параметризация муравьиного алгоритма (начало)

Параметры			Граф 1			Граф 2			Граф 3		
$\alpha$	$\rho$	$t_{max}$	min	max	mean	min	max	mean	min	max	mean
0.1	0.1	200	2	11	6.2	11	20	14.8	6	15	11.9
0.1	0.1	500	0	7	3.6	9	16	13.0	3	14	7.9
0.1	0.1	1000	0	6	2.9	5	14	9.3	2	12	7.0
0.1	0.1	1500	0	3	1.2	0	14	9.0	5	12	7.5
0.1	0.1	2000	0	3	0.8	5	13	8.3	3	9	5.6
0.1	0.25	200	1	13	8.0	7	17	12.9	4	21	12.8
0.1	0.25	500	0	9	2.7	5	18	13.0	8	14	11.1
0.1	0.25	1000	0	5	2.2	0	15	8.1	3	10	7.5
0.1	0.25	1500	0	3	1.2	5	12	8.6	1	9	5.7
0.1	0.25	2000	0	3	0.9	5	14	9.8	1	9	7.2
0.1	0.5	200	3	10	7.0	6	19	13.1	7	19	13.4
0.1	0.5	500	0	5	2.3	9	19	13.5	4	16	9.7
0.1	0.5	1000	0	5	1.4	7	13	9.2	1	12	8.5
0.1	0.5	1500	0	6	1.7	0	14	9.3	3	10	7.0
0.1	0.5	2000	0	3	1.1	0	11	7.3	4	9	7.2
0.1	0.75	200	1	11	4.9	9	19	14.5	7	19	13.3
0.1	0.75	500	0	8	3.8	9	15	11.7	8	14	11.0
0.1	0.75	1000	0	5	2.2	8	15	12.2	2	12	7.9
0.1	0.75	1500	0	5	1.2	5	12	8.6	4	12	8.0
0.1	0.75	2000	0	3	0.8	0	11	6.9	0	10	6.0
0.1	0.9	200	1	12	4.2	6	19	14.4	4	20	13.7
0.1	0.9	500	0	7	2.4	3	16	12.2	5	12	9.1
0.1	0.9	1000	0	5	1.9	0	13	9.4	4	13	8.4
0.1	0.9	1500	0	3	0.8	6	12	9.5	0	11	7.4
0.1	0.9	2000	0	6	1.8	5	11	8.0	1	10	6.4
0.25	0.1	200	0	8	4.9	3	20	14.2	1	19	13.0
0.25	0.1	500	1	6	4.0	9	17	12.9	5	14	10.0
0.25	0.1	1000	0	3	2.0	0	11	6.8	5	11	8.3
0.25	0.1	1500	0	3	1.0	5	14	8.4	6	11	9.0
0.25	0.1	2000	0	2	0.8	5	13	9.1	2	10	5.9
0.25	0.25	200	0	11	5.1	14	19	16.6	8	20	14.6
0.25	0.25	500	0	7	2.2	6	15	11.0	2	15	10.3

Таблица 1 — Параметризация муравьиного алгоритма (продолжение)

Параметры			Граф 1			Граф 2			Граф 3		
$\alpha$	$\rho$	$t_{max}$	min	max	mean	min	max	mean	min	max	mean
0.25	0.25	1000	0	3	1.3	3	15	9.0	2	13	7.0
0.25	0.25	1500	0	3	1.4	3	13	8.2	2	12	7.5
0.25	0.25	2000	0	3	1.3	3	13	10.0	4	9	7.1
0.25	0.5	200	0	11	5.1	0	19	13.1	10	17	13.9
0.25	0.5	500	1	6	4.2	6	16	11.3	8	13	10.3
0.25	0.5	1000	0	7	1.3	9	16	11.2	3	12	8.2
0.25	0.5	1500	0	2	0.8	5	13	9.3	3	12	7.4
0.25	0.5	2000	0	3	0.8	3	12	8.6	2	10	7.0
0.25	0.75	200	0	10	4.9	7	21	15.6	10	19	14.3
0.25	0.75	500	0	6	3.6	3	15	10.6	6	15	10.3
0.25	0.75	1000	0	3	0.9	6	13	10.4	4	12	7.9
0.25	0.75	1500	0	3	1.3	5	13	9.5	3	13	8.5
0.25	0.75	2000	0	2	0.3	3	9	7.1	2	12	7.0
0.25	0.9	200	0	9	4.7	8	20	15.1	10	18	13.4
0.25	0.9	500	0	5	1.9	8	16	11.6	8	17	11.8
0.25	0.9	1000	0	3	1.2	3	13	8.9	3	14	7.6
0.25	0.9	1500	0	4	1.1	6	14	10.0	6	10	8.2
0.25	0.9	2000	0	3	0.4	3	12	7.4	4	10	6.8
0.5	0.1	200	1	8	4.4	13	24	16.6	8	18	14.9
0.5	0.1	500	0	4	0.8	9	16	11.2	5	15	10.7
0.5	0.1	1000	0	4	0.9	0	14	9.7	1	13	8.7
0.5	0.1	1500	0	3	1.0	0	12	8.6	5	13	7.8
0.5	0.1	2000	0	2	0.2	5	13	8.8	6	12	9.7
0.5	0.25	200	0	8	4.7	10	19	14.0	8	20	13.4
0.5	0.25	500	0	6	1.7	8	17	12.7	5	15	10.5
0.5	0.25	1000	0	6	1.2	8	16	11.1	3	15	10.1
0.5	0.25	1500	0	3	0.9	8	13	11.1	2	13	7.8
0.5	0.25	2000	0	3	0.5	0	11	6.7	5	12	8.4
0.5	0.5	200	0	6	2.8	6	19	13.3	6	16	12.4
0.5	0.5	500	2	5	3.2	7	17	12.0	7	16	10.8
0.5	0.5	1000	0	3	1.6	8	17	11.4	4	12	8.6
0.5	0.5	1500	0	3	0.9	3	14	9.5	4	13	8.4
0.5	0.5	2000	0	1	0.1	0	11	7.9	5	13	9.0
0.5	0.75	200	1	8	4.5	10	19	15.1	8	20	16.0
0.5	0.75	500	0	3	2.1	7	17	11.7	5	17	11.9

Таблица 1 — Параметризация муравьиного алгоритма (продолжение)

Параметры			Граф 1			Граф 2			Граф 3		
$\alpha$	$\rho$	$t_{max}$	min	max	mean	min	max	mean	min	max	mean
0.5	0.75	1000	0	3	1.2	9	16	11.7	5	17	11.1
0.5	0.75	1500	0	3	0.6	8	13	10.6	4	11	7.7
0.5	0.75	2000	0	2	0.3	3	14	8.4	0	10	6.9
0.5	0.9	200	0	7	4.6	5	20	14.5	12	20	16.4
0.5	0.9	500	0	6	3.5	9	16	12.7	5	18	12.1
0.5	0.9	1000	0	3	1.2	0	15	9.9	5	14	10.7
0.5	0.9	1500	0	3	1.5	0	15	9.1	6	12	8.7
0.5	0.9	2000	0	2	0.4	3	11	7.7	1	13	8.5
0.75	0.1	200	0	10	3.4	9	20	14.9	7	21	15.7
0.75	0.1	500	0	3	1.4	8	18	13.6	6	18	11.9
0.75	0.1	1000	0	2	0.2	7	14	10.7	7	15	10.6
0.75	0.1	1500	0	5	0.7	7	15	10.3	1	15	9.4
0.75	0.1	2000	0	3	0.3	0	13	8.0	2	15	8.1
0.75	0.25	200	0	9	4.3	15	25	18.7	8	18	15.5
0.75	0.25	500	0	5	2.2	6	17	13.0	2	20	13.0
0.75	0.25	1000	0	3	0.7	6	15	11.0	6	16	11.9
0.75	0.25	1500	0	2	0.3	7	14	10.8	7	15	10.4
0.75	0.25	2000	0	0	0.0	3	14	9.1	5	14	9.2
0.75	0.5	200	2	10	4.3	10	23	15.8	13	23	16.7
0.75	0.5	500	0	3	1.3	8	22	13.3	6	18	13.8
0.75	0.5	1000	0	0	0.0	3	15	10.2	5	16	11.4
0.75	0.5	1500	0	0	0.0	5	13	9.3	7	13	9.5
0.75	0.5	2000	0	0	0.0	0	16	8.0	4	14	9.9
0.75	0.75	200	0	7	1.8	11	21	17.2	8	21	17.2
0.75	0.75	500	0	3	1.4	3	19	10.6	11	20	14.4
0.75	0.75	1000	0	2	0.3	5	18	10.9	8	16	11.7
0.75	0.75	1500	0	2	0.3	3	16	9.0	3	16	9.6
0.75	0.75	2000	0	1	0.1	8	15	10.0	7	14	11.0
0.75	0.9	200	0	6	3.1	6	22	15.4	3	21	15.3
0.75	0.9	500	0	3	1.6	7	17	12.8	7	16	11.1
0.75	0.9	1000	0	3	1.1	5	13	9.7	5	15	10.2
0.75	0.9	1500	0	0	0.0	9	14	10.8	8	12	10.0
0.75	0.9	2000	0	3	0.3	3	13	8.6	5	10	7.9
0.9	0.1	200	0	6	2.4	9	26	18.4	7	24	17.3
0.9	0.1	500	0	3	0.6	5	19	13.3	5	18	15.1

Таблица 1 — Параметризация муравьиного алгоритма (продолжение)

Параметры			Граф 1			Граф 2			Граф 3		
$\alpha$	$\rho$	$t_{max}$	min	max	mean	min	max	mean	min	max	mean
0.9	0.1	1000	0	1	0.1	7	17	12.1	8	20	13.7
0.9	0.1	1500	0	2	0.2	3	15	9.5	9	18	12.5
0.9	0.1	2000	0	1	0.1	3	11	7.8	6	13	8.6
0.9	0.25	200	0	6	2.5	10	18	15.8	8	20	14.3
0.9	0.25	500	0	3	0.6	7	20	14.1	11	19	14.6
0.9	0.25	1000	0	3	0.3	6	16	12.2	8	17	12.3
0.9	0.25	1500	0	2	0.2	3	15	9.4	7	17	12.3
0.9	0.25	2000	0	0	0.0	5	14	9.6	5	14	8.4
0.9	0.5	200	0	6	4.3	3	21	15.2	11	23	17.0
0.9	0.5	500	0	3	0.7	5	19	11.5	11	19	15.7
0.9	0.5	1000	0	3	0.5	3	11	8.0	1	15	9.5
0.9	0.5	1500	0	1	0.1	5	17	10.2	7	14	11.2
0.9	0.5	2000	0	0	0.0	3	16	10.2	5	15	10.3
0.9	0.75	200	0	6	1.9	7	24	17.1	11	22	16.4
0.9	0.75	500	0	3	1.1	7	21	12.4	7	19	14.8
0.9	0.75	1000	0	3	0.5	0	14	10.0	1	17	11.5
0.9	0.75	1500	0	0	0.0	6	15	9.9	5	16	10.7
0.9	0.75	2000	0	2	0.2	6	14	10.0	8	17	11.1
0.9	0.9	200	0	8	3.3	5	26	17.1	12	24	17.4
0.9	0.9	500	0	3	0.8	7	18	13.4	8	16	13.8
0.9	0.9	1000	0	2	0.2	5	15	9.2	7	14	10.7
0.9	0.9	1500	0	0	0.0	8	16	11.1	5	15	9.5
0.9	0.9	2000	0	0	0.0	3	13	9.1	5	14	11.1

Таблица 1 — Параметризация муравьиного алгоритма (окончание)