1

120108T

2021 7

18851009178

			10287
	210016		www.nuaa.edu.cn
985		211	
	☐ ☑ □ ☑ □ □		
			29
	☑ □ ☑ ☑ □ □ □ ☑ ☑ ☑ ☑ □		
	1825		1281
			1952
	1956		62
			2016
	4890		4393
			93.63%
150	1952 1978 1981 1996 “ 211 ” 2011 “ 985 ” 2017		
300			

	120108T		
			1201
			12
		2000	

25% 2020 8000

80 35 43%
45

-

		80
		35
		45
		5
		6
		5
		3

4.1

	27
	7, 26%
	21, 78%
	27, 100%
	25, 93%
35	11, 41%
36-55	15, 56%
/	0%/100%
	7

4.2

									/
		1983.10	Python						
		1966.5	IT						
		1976.10							

		1983.3							

1963.8

		1973.5							
		1975.2							
		1975.11	II II						
		1977.6							
		1979.12							
		1983.06	Python						
		1983.7							

		1985.7	IT						
		1986.1							
		1987.3							
		1987.11							
		1990.9							

		1988.4							
		1990.4							
		1990.10							
		1990.11							

4.3

	48	4		5
	48	4		5
	56	4		5
	48	4		6
	48	4		6

	Python						
	2013						
	1 Advanced Maintenance Policies for Shock and Damage Models Springer 2018 2 2019 3 2019 4 2019 5 2020 6 2020						
	1 Springer 2 13 50 2 47 3 3 70.3 4 IEEE Transactions on Reliability 2015 5 2018 6 2020						
	2.5					117.3	
	384					6	

	2008		
	1 2 3 3 2018 4 5 IBM 3		
	1 80 2 3		
	5		54
	471		12

	2011 3						
	- -						
	1 2 2018 3 2018						
	1 2020 2 2018 3 2020 4 2012 2014 5 2020 6 2020						
	4			150			
	312			14			

	757.3		260
	500		
	2		
	2019 400 2020 600 261 40		

		246	2019	1590
		37	2019	820
		7	2019	1090
		8	2019	860
	AnyLogic	61	2018	440
	APS2018	50	2018	55
	MW9.0	100	2018	38
	TOP-BOSS 2015	100	2018	50
ERP	VBSE	120	2018	590
		200	2020	795
		60	2020	957
Stata	16.0	60	2020	162
	V2.0	70	2020	968
		60	2020	842
		6	2020	195
		60	2020	981

3

6 2000

3

4

10 2

2012 102

14 2017

A- 5.3% 10

B 20% 50

124 43 36 48

83.9% 48 1

1 1

2 7

33 30

18 51

13 1 1 7

Fellow PIIF-GA-2013-629051

IBM

IBM

9

30

4000

068

EKM 30 IBM

IBM

1952

16

2018

59

7

6 2019

15

10

7000

20 2018

86

8

1

2

3

4

5

6

7

8

9

IT

11

12

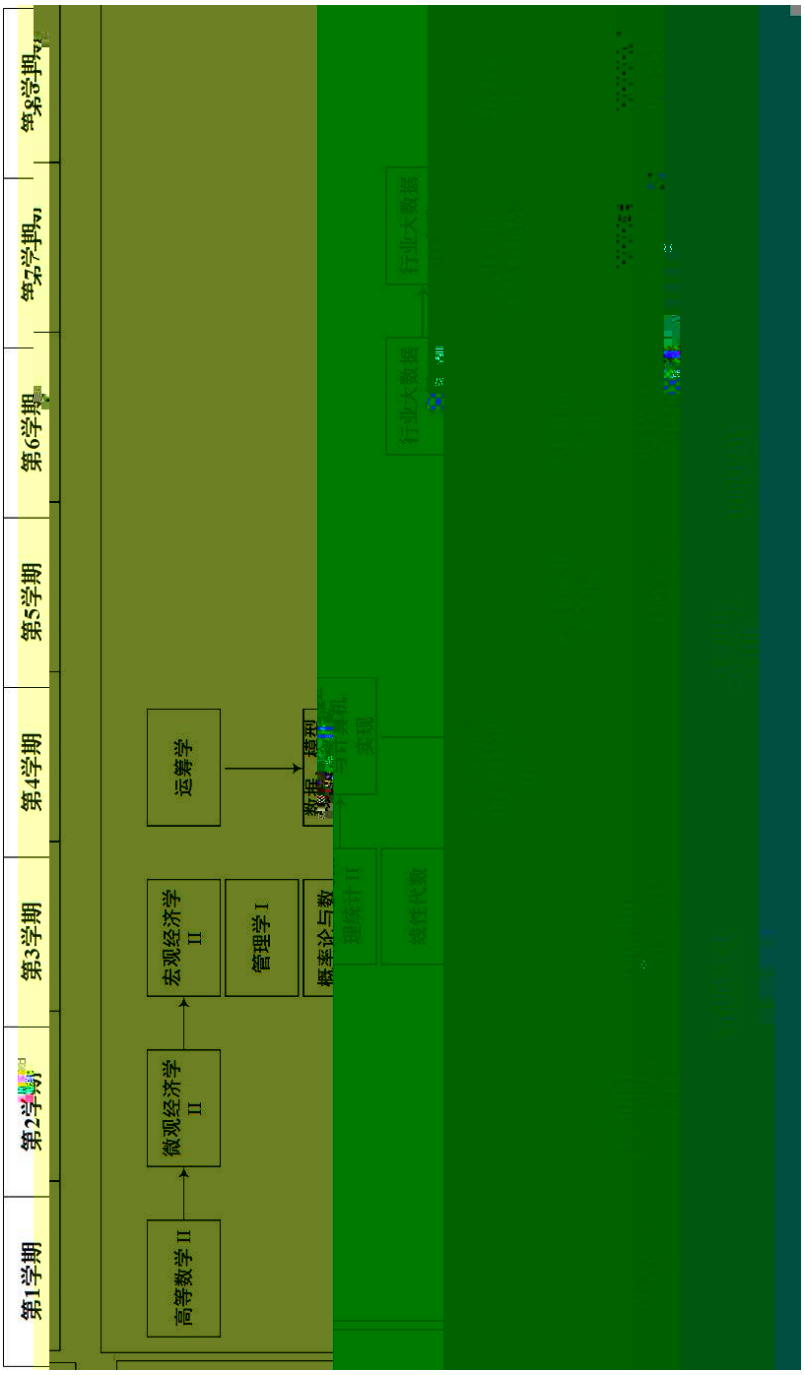
		3
		3.5
09203440		3
		3
		3
		15.5

1.

165

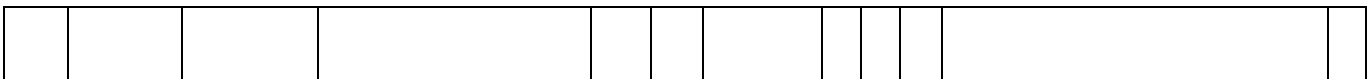
	62	51.5	10.5
	70.5	46.5	24
	32.5	27	5.5
	165	125	40

2.

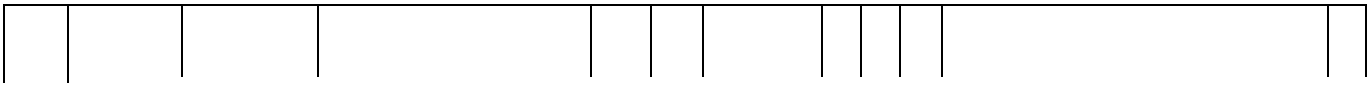


							/					1	2	3	4	5	6	7	8	
		08101120	1	5	80	80														
		08201480	2	1.5	24	24														
		81101400	3	0.5	26	26														

							/					1	2	3	4	5	6	7	8			
		82101030	4	0.5	8	3	2			3												
		82101040	5	2	32	24	8															
		83100020	6	1	16	12	4															
		08101630	7	4.5	72	72																
		08202250	8	2	32	32																
		09201080	9 (C)	2	32	32				30												
		17001010	10	3	54	42	12															
		81101410	11	0.5	34	34																
		83200020	12	1	16	16																
		08101240	13	2.5	40	40																
		17001050	14	3	54	42	12															
		81102580	15	0.5	26	26																
		17002050	16	5	94	66	28															
		81102590	17	0.5	34																	



							/					1	2	3	4	5	6	7	8		
		09202020		3	48	48															
				2.5	40	40															
				3	48	48				20											
		09103630		2.5	48	32	16														
				2.5	40	40															
				2	32	32															
				2	32	32															
				3	48	48															
		09004020		1	16	16															
		09102350		3	48	48				16											
		09103640		3	48	48															
		09102330		2.5	40	40															
				2	32	32															
		09102510		3	48	48															
		09102360																			



/

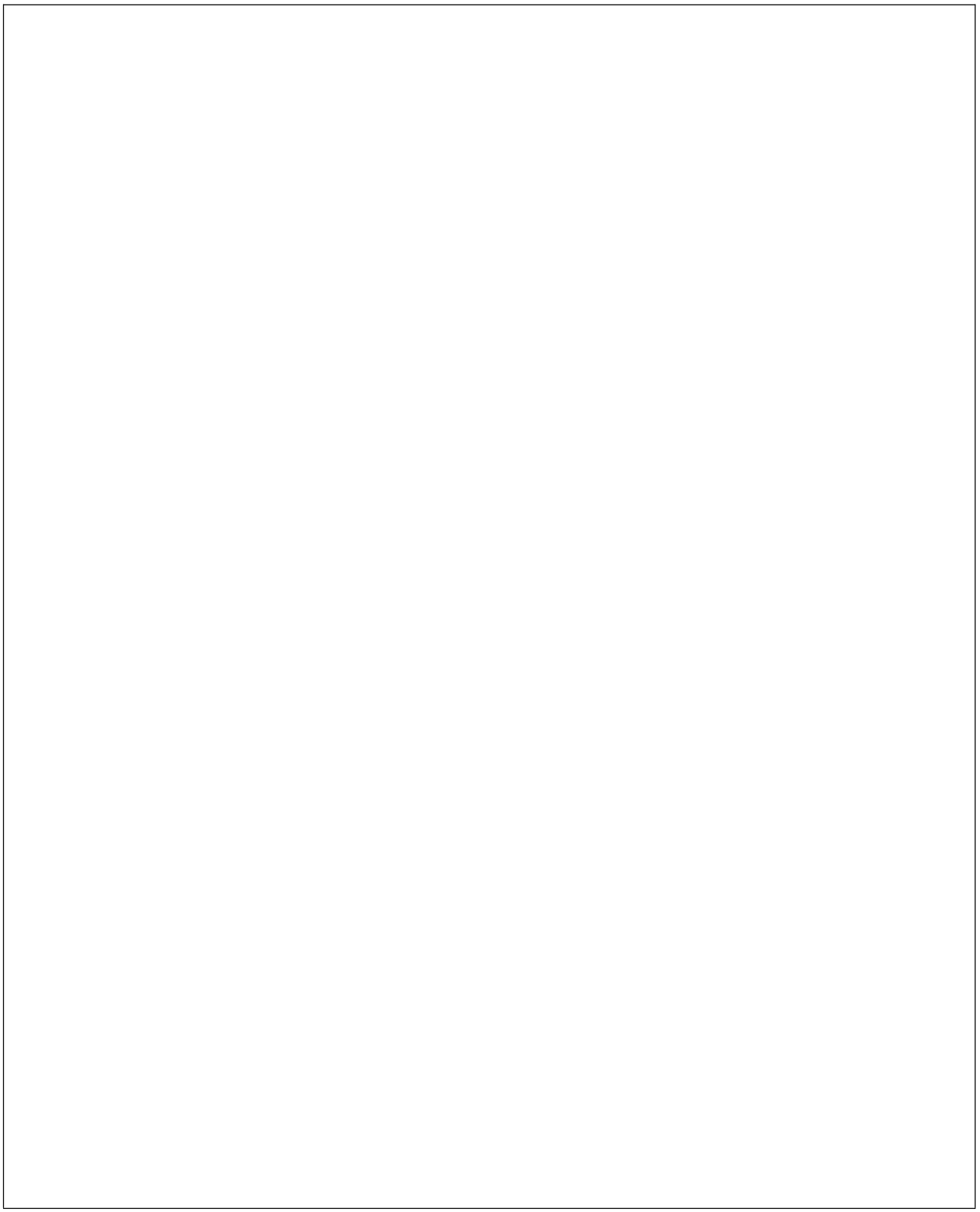
1 2 3 4 5 6 7 8

	[redacted]

“ ”

“ ”

上

	[redacted]

		[redacted]
		[redacted]
		[redacted]