

L^AT_EX 中文报告模板

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第一章 L^AT_EX

1.1 文本

1. 正常
2. 加粗
3. 斜体
4. 下划线
5. highlight

1.2 图片

1.2.1 单图



图 1.1: SCUT 的 Logo

1.2.2 子图



图 1.2: 子图

1.3 表

表 1.1: 参数值

Parameter	Value
α	1
β	1

表 1.2: 参数值

Module	Parameter	Value
contrastive model	number of RBF centers, $k_{\text{rbf_c}}$	\sqrt{n}
	number of hidden neurons, k_{hidden}	$\frac{\sqrt{n}}{2}$
	dropout rate	0.3
regression model	repetition rate of offline data	10%
	number of centers of one RBFN, $k_{\text{rbf_r}}$	$\sqrt{\frac{1.1n}{3}}$
topological sorting	threshold thr	$0.3 * nv_{\text{remain}}$
GA	distribution index η_c in SBX	15
	probability of crossover	100%
	distribution index η_m in PM	15
	probability of mutation	$\frac{1}{d}$

有时候太懒了，直接截图，把图片扔到 table 环境，例如上边的表。

1.4 伪代码

Algorithm 1 KahnAlgorithm
Input: Graph $G(\mathbb{V}, \mathbb{E})$
Output: Sequence L
1: $L \leftarrow$ an empty sequence
2: $Q \leftarrow$ the vertices whose indegree is zero
3: while Q is not empty do
4: $u \leftarrow$ remove the top node of Q
5: add u to L
6: for each node v with an edge e from u to v do
7: remove edge e from graph G
8: if indegree of v is 0 then
9: push v to Q
10: end if
11: end for
12: end while
13: return L

Algorithm 2 框架

Input: Training data \mathbb{D} , Maximum generation g_{\max} , Population size n **Output:** The best solution

```

1: Creating paired dataset  $\mathbb{D}_{cl}$ 
2: Training contrastive model  $M_{con}$  from  $\mathbb{D}_{cl}$ 
3:  $i \leftarrow 0$ 
4:  $P \leftarrow$  Latin hypercube sampling.
5: while  $i < g_{\max}$  do
6:    $C \leftarrow$  apply SBX and PM on  $P$ 
7:    $P \leftarrow P \cup C$ 
8:    $M_{reg} \leftarrow \text{BuildRegressionModel}(P, \mathbb{D})$ 
9:    $L \leftarrow \text{TopologicalSort}(P, M_{con}, M_{reg}, n)$ 
10:   $P \leftarrow P[L]$ 
11:   $i \leftarrow i + 1$ 
12: end while
13: return  $P[0]$ 

```

有时候太懒了，直接截图，把图片扔到 algorithm 环境，例如上边的算法。

1.5 高亮

```

1  #include <algorithm>
2  using namespace std;
3  void quickSort(int arr[],
4                int begin,
5                int end) {
6      int i, j, t, pivot;
7      if (begin > end)
8          return;
9
10     pivot = arr[begin];
11     i = begin;
12     j = end;
13     while (i != j) {
14         while (arr[j] >= pivot && i < j)
15             j--;
16         while (arr[i] <= pivot && i < j)
17             i++;
18         if (i < j)
19             swap(arr[i], arr[j]);
20     }
21
22     arr[begin] = arr[i];
23     arr[i] = pivot;
24     quickSort(arr, begin, i - 1);
25     quickSort(arr, i + 1, end);
26 }

```

1.6 多栏

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1.7 数学

Interline Formula:

$$a_n = a_{n-1} + 1$$

(1.1)

行内公式: 这是一个简单的等差数列公式 $a_n = a_{n-1} + 1$ 。

1.8 引用

- 图片: [图 1.1](#)
- 子图: [子图 1.2a](#)
- 表: [表 1.1](#)
- 伪代码: [算法 1](#)
- 公式: [式 1.1](#)
- 章: [chapter 一](#)
- 论文:^[1]
- URL 1: [baidu](#)
- URL 2: <https://baidu.com>

参考文献

- [1] HE K, ZHANG X, REN S, et al. Deep residual learning for image recognition[C]//Proceedings of the IEEE conference on computer vision and pattern recognition. 2016: 770-778.