Generalized LL parsing for context-free constrained path search problem

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1   Introduction

In   [1] some problems on formal languages path problems are formulatred. We want to propose an idea of context-free languages constrained path problem solution. It is based on generalized LL (GLL) [2] parsing algorithm which allow to process arbitrary context-free grammars.

2   Generalised LL parsing

3   Graph processing with generalised LL

We can specify path constraint as context-free grammar.

```
s: A s B | eps
```

4   Generalized LL for path searching

Full index — for dynamic graphs. It is necessary only recalculate ... This operation is native for basic algorithm.

5　Discussion

Список литературы

[1] Miller, J. A., Ramaswamy, L., Kochut, K. J., & Fard, A. (2015, June). Research Directions for Big Data Graph Analytics. In 2015 IEEE International Congress on Big Data (pp. 785–794). IEEE.

[2] Scott, E., & Johnstone, A. (2010). GLL parsing. Electronic Notes in Theoretical Computer Science, 253(7), 177–189.