Realization Problems on Reachability Sequences COCOON 2020

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Overview

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Our results show an interesting interplay between the local property of degree and the global property of reachability.

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		Out-degree	
		Unbounded	Bounded
In-Degree	Unbounded (DAGs) Bounded (Trees)		

	Out-degree	
	Unbounded	Bounded
$\begin{array}{c} \textbf{In-Degree} & \textbf{Unbounded (DAGs)} \\ \textbf{Bounded} & \textbf{(Trees)} \end{array}$	Linear-time	

		Out-degree		
		Unbounded	Bounded	
In-Degree	Unbounded (DAGs) Bounded (Trees)	Linear-time NP-Complete	NP-Complete NP-Complete	

			Out-degree		
			Unbounded	Bour	nded
In-Degree	Unbounded	(DAGs)	Linear-time	$(O(\log n), O(\log n))$	g n))
	Bounded	(Trees)	$(O(\log n), O(\log n))$	$(O(\log n), O(\log n))$	g n))

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