CeTA @ CoCo 2017*

Julian Nagele Christian Sternagel Thomas Sternagel

Computational Logic Group @ University of Innsbruck, Austria

September 8, 2017

CoCo @ IWC 2017

*Supported by Austrian Science Fund (FWF) projects P27502 and P27528

New in version 2.31

Term Rewrite Systems

- a left-linear TRS $\mathcal{R}$ is confluent if $\mathcal{R}\leftarrow\cdot\rtimes\rightarrow_{\mathcal{R}} \subseteq \twoheadrightarrow_{\mathcal{C}} \cdot \overset{*}{_{\mathcal{C}}}\leftarrow$ for some terminating critical-pair-closing $\mathcal{C}$ of $\mathcal{R}$

New in version 2.31

Term Rewrite Systems

- a left-linear TRS $\mathcal{R}$ is confluent if $_{\mathcal{R}}\!\leftarrow\!\cdot\!\rightarrow_{\mathcal{R}} \subseteq \twoheadrightarrow_{\mathcal{C}} \cdot {}^{*}_{\mathcal{C}}\!\leftarrow$ for some terminating critical-pair-closing $\mathcal{C}$ of $\mathcal{R}$

Conditional TRSs

New in version 2.31

Term Rewrite Systems

- a left-linear TRS $\mathcal{R}$ is confluent if ${}_{\mathcal{R}}\!\leftarrow\!\cdot\!\rightarrow_{\mathcal{R}} \subseteq \twoheadrightarrow_{\mathcal{C}} \cdot {}^{*}_{\mathcal{C}}\!\leftarrow$ for some terminating critical-pair-closing $\mathcal{C}$ of $\mathcal{R}$

Conditional TRSs

- a quasi-decreasing, strongly deterministic CTRS with joinable critical pairs is confluent

New in version 2.31

Term Rewrite Systems

- a left-linear TRS $\mathcal{R}$ is confluent if $_{\mathcal{R}}\!\leftarrow\!\!\cdot\!\!\rightarrow_{\mathcal{R}} \subseteq \twoheadrightarrow_{\mathcal{C}} \cdot {}^{*}_{\mathcal{C}}\!\leftarrow$ for some terminating critical-pair-closing $\mathcal{C}$ of $\mathcal{R}$

Conditional TRSs

- a quasi-decreasing, strongly deterministic CTRS with joinable critical pairs is confluent
- inlining of conditions

New in version 2.31

Term Rewrite Systems

- a left-linear TRS $\mathcal{R}$ is confluent if $_{\mathcal{R}}\!\leftarrow\!\!\rtimes\!\!\rightarrow_{\mathcal{R}} \subseteq \twoheadrightarrow_{\mathcal{C}} \cdot {}^{*}_{\mathcal{C}}\!\leftarrow$ for some terminating critical-pair-closing $\mathcal{C}$ of $\mathcal{R}$

Conditional TRSs

- a quasi-decreasing, strongly deterministic CTRS with joinable critical pairs is confluent
- inlining of conditions
- removal of infeasible rules

New in version 2.31

Term Rewrite Systems

- a left-linear TRS $\mathcal{R}$ is confluent if $_{\mathcal{R}}\!\leftarrow\!\!\rtimes\!\!\rightarrow_{\mathcal{R}} \subseteq \twoheadrightarrow_{\mathcal{C}} \cdot {}^{*}_{\mathcal{C}}\!\leftarrow$ for some terminating critical-pair-closing $\mathcal{C}$ of $\mathcal{R}$

Conditional TRSs

- a quasi-decreasing, strongly deterministic CTRS with joinable critical pairs is confluent
- inlining of conditions
- removal of infeasible rules
- non-confluence methods