

## Reinforcement Learning and Model Predictive Control

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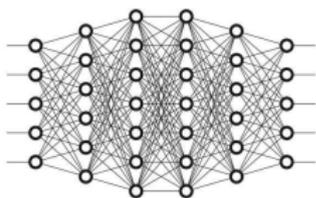
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- Safety? Explainability?

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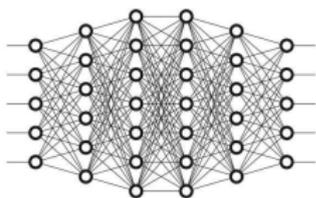
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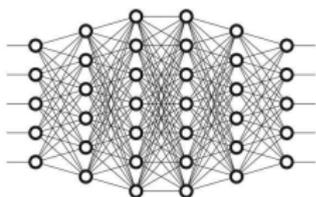
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- SYSID (fit to data)
- Robust MPC for uncertainties



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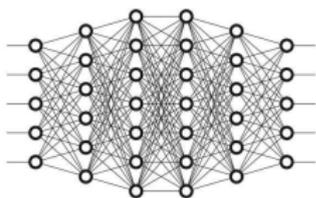
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**RL:** big toolbox to “tune” parameters  $\theta$  from data (tools need adaptation though)

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### Where is this going?

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2. Reinforcement Learning for mixed-integer problems with MPC-based function approximation, S. Gros, M. Zanon, IFAC 2020 (submitted)
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8. Practical Reinforcement Learning of Stabilizing Economic MPC, M. Zanon, S. Gros, A. Bemporad, European Control Conference 2019
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