FH Salzburg

Reuf Kozlica
Junior Researcher (FH Salzburg)

reuf.kozlica@fh-salzburg.ac.at
https://github.com/reufko
https://www.linkedin.com/in/reuf-kozlica/

2015-2018 **Bachelor's Degree**
(FH Salzburg)
Media Informatics

2018-2020 **Master's Degree**
(FH Salzburg)
Data Science & Adaptive Software Systems

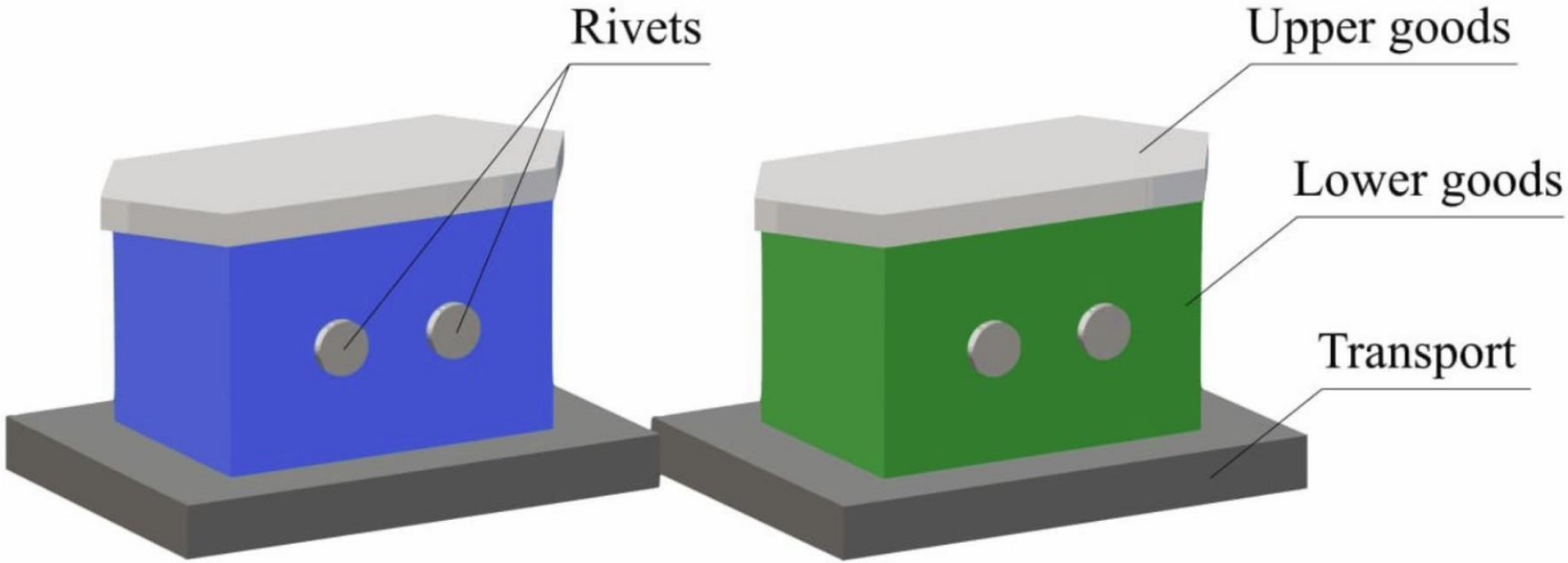
2020-present **Junior Researcher** (FH Salzburg)
Doctoral Student (University of Salzburg)

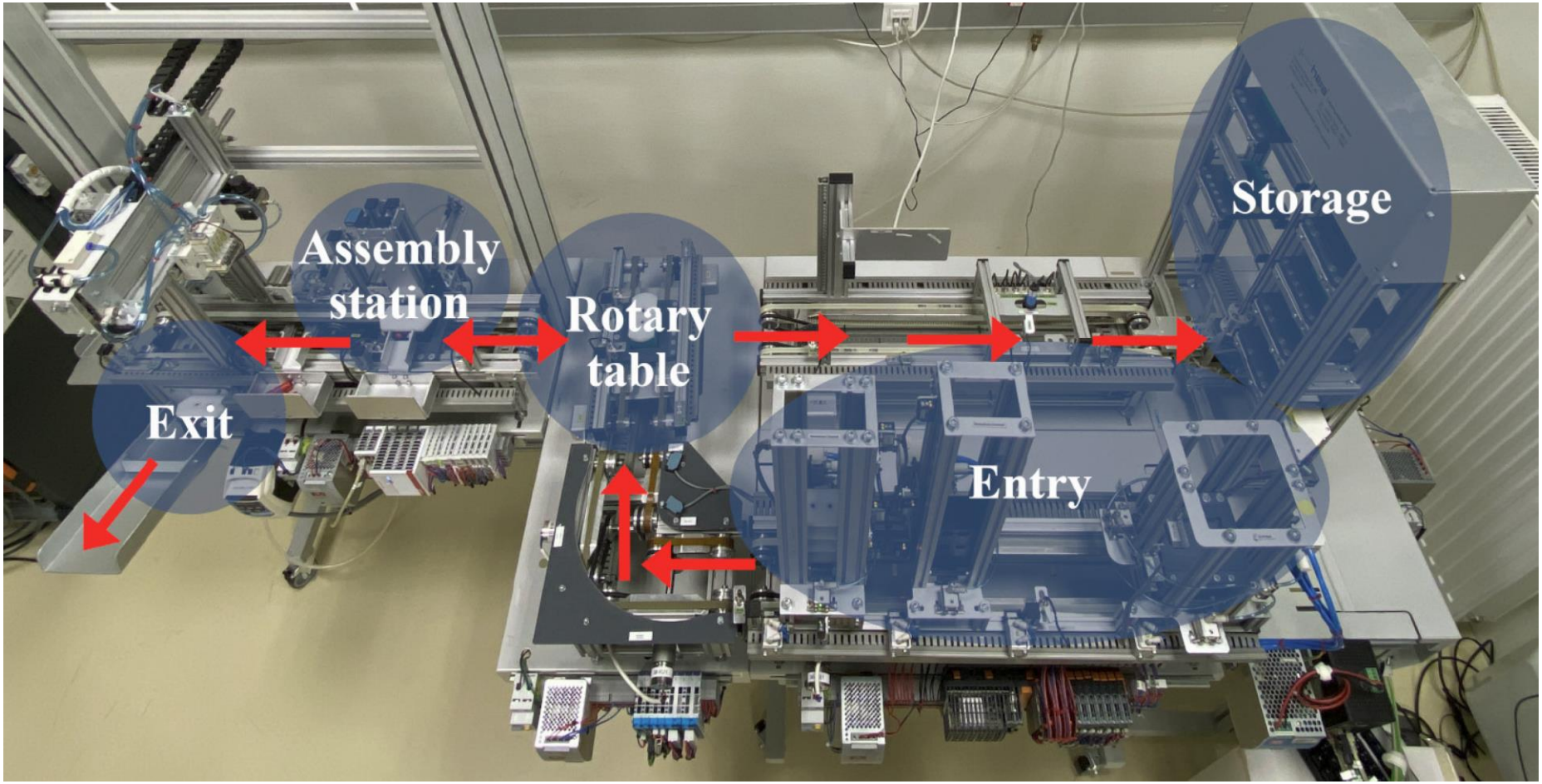
Involvement in RL:

- Reinforcement Learning in Production Plants
  - ➢ Automatic assembly and sorting of products
- Teaching-Assistant

I'm interested in:

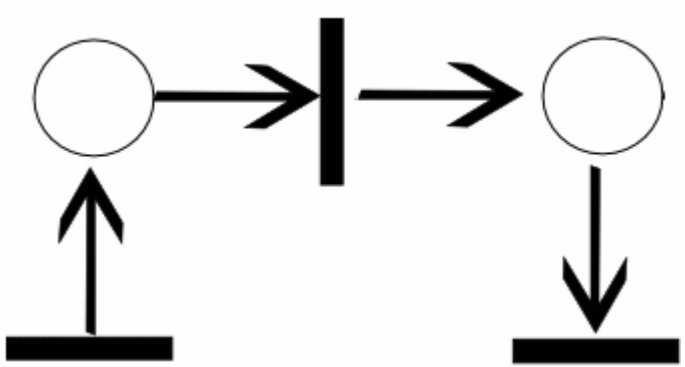
- Advanced RL algorithms with focus on hierarchical methods
- Robustness and scalability of RL algorithms
- Deployment of RL algorithms to real world tasks and architectures


Rivets
Upper goods
Lower goods
Transport

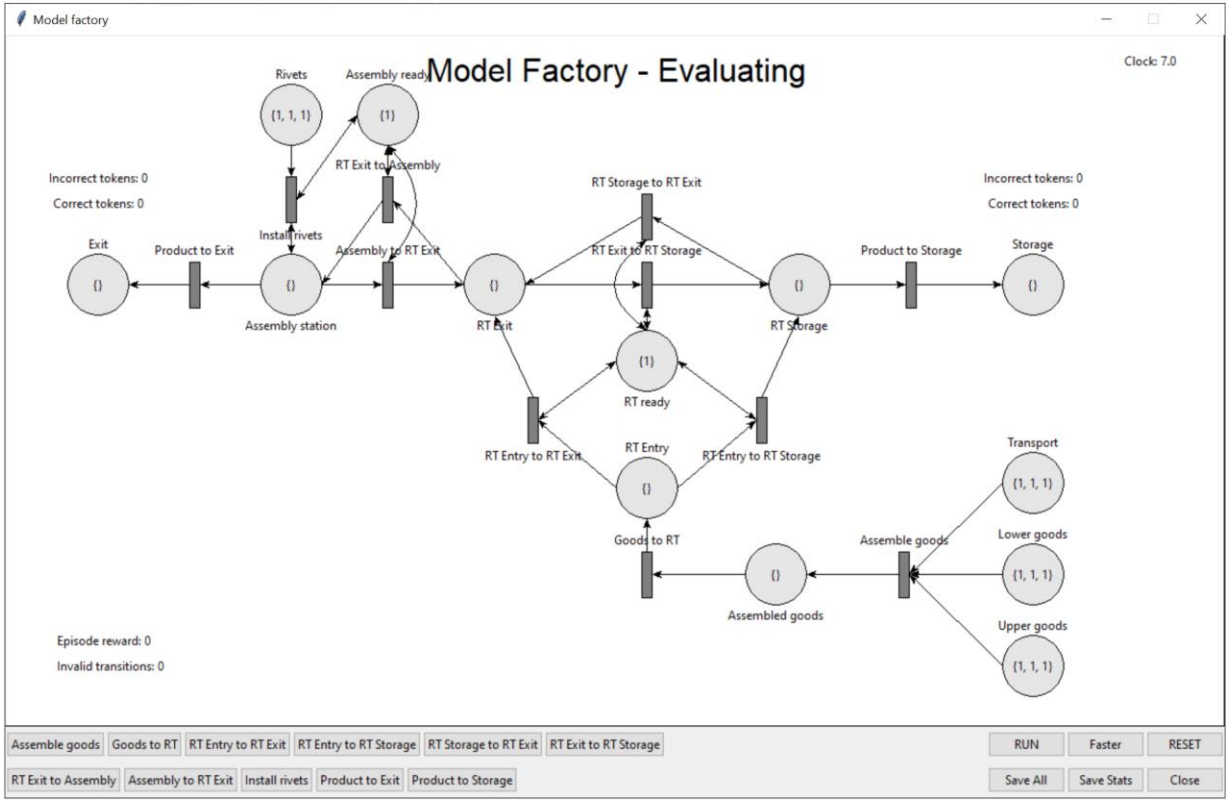

Assembly station
Rotary table
Storage
Exit
Entry

Petri Nets as a Simulation

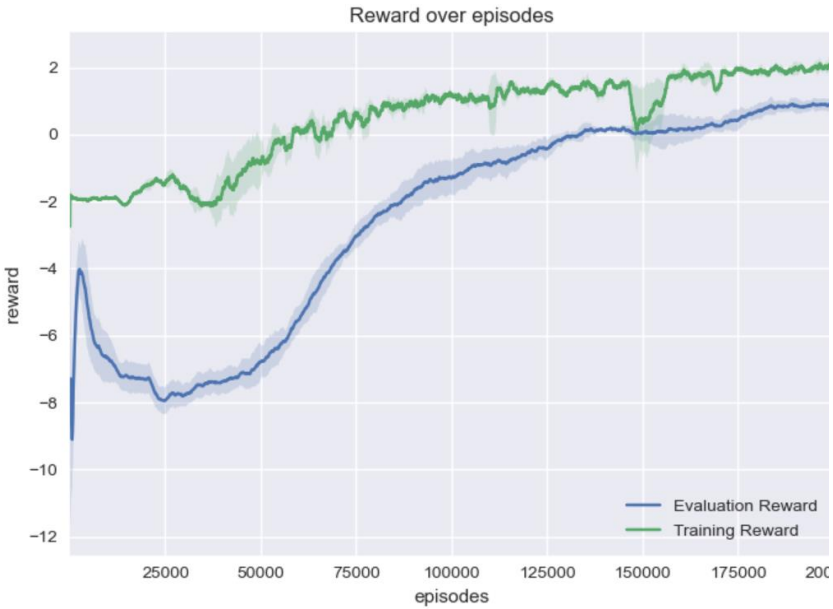
- Mathematical modeling language
- Directed bipartite graph:
  - Places
  - Transitions
  - Arcs
  - Tokens
- Graphical notation for stepwise processes
- Application areas:
  - Process modeling
  - Control engineering
  - Simulation etc.



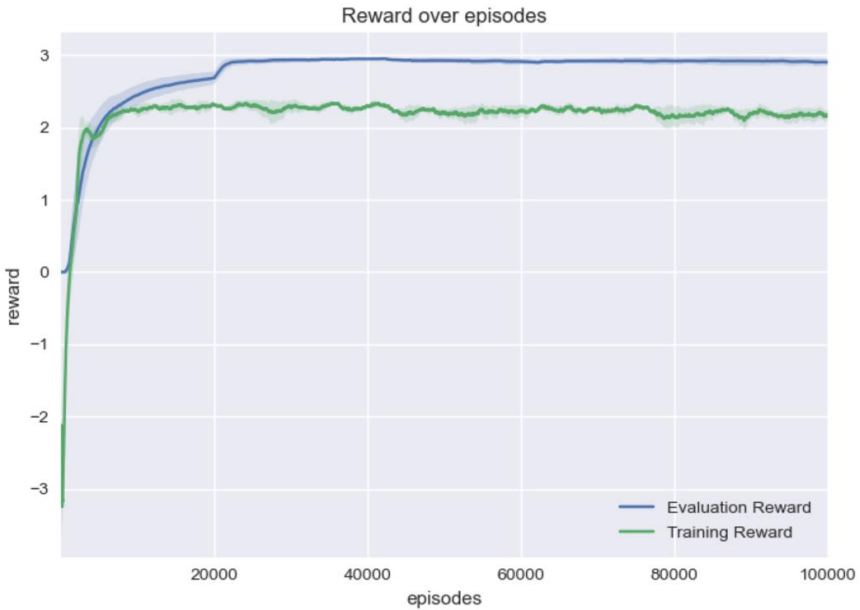
Petri Nets as a Simulation



Deep Q-Learning and PPO results



DQN



PPO