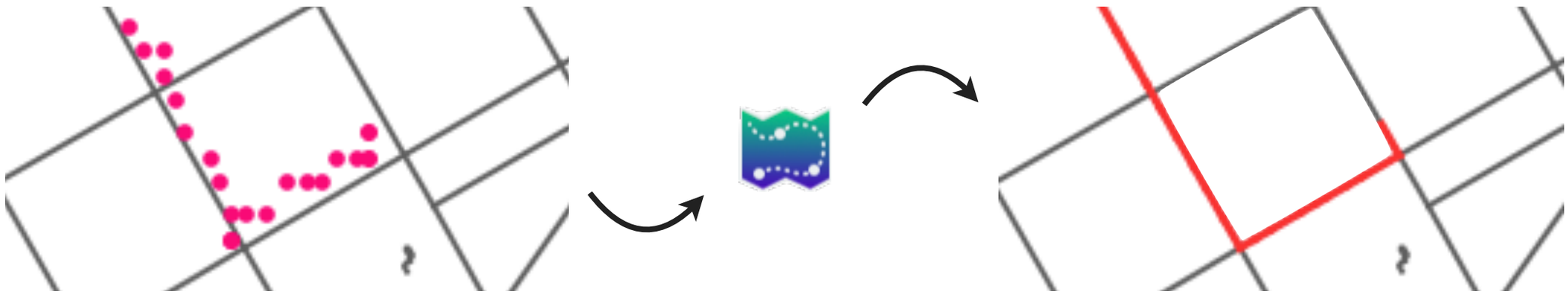
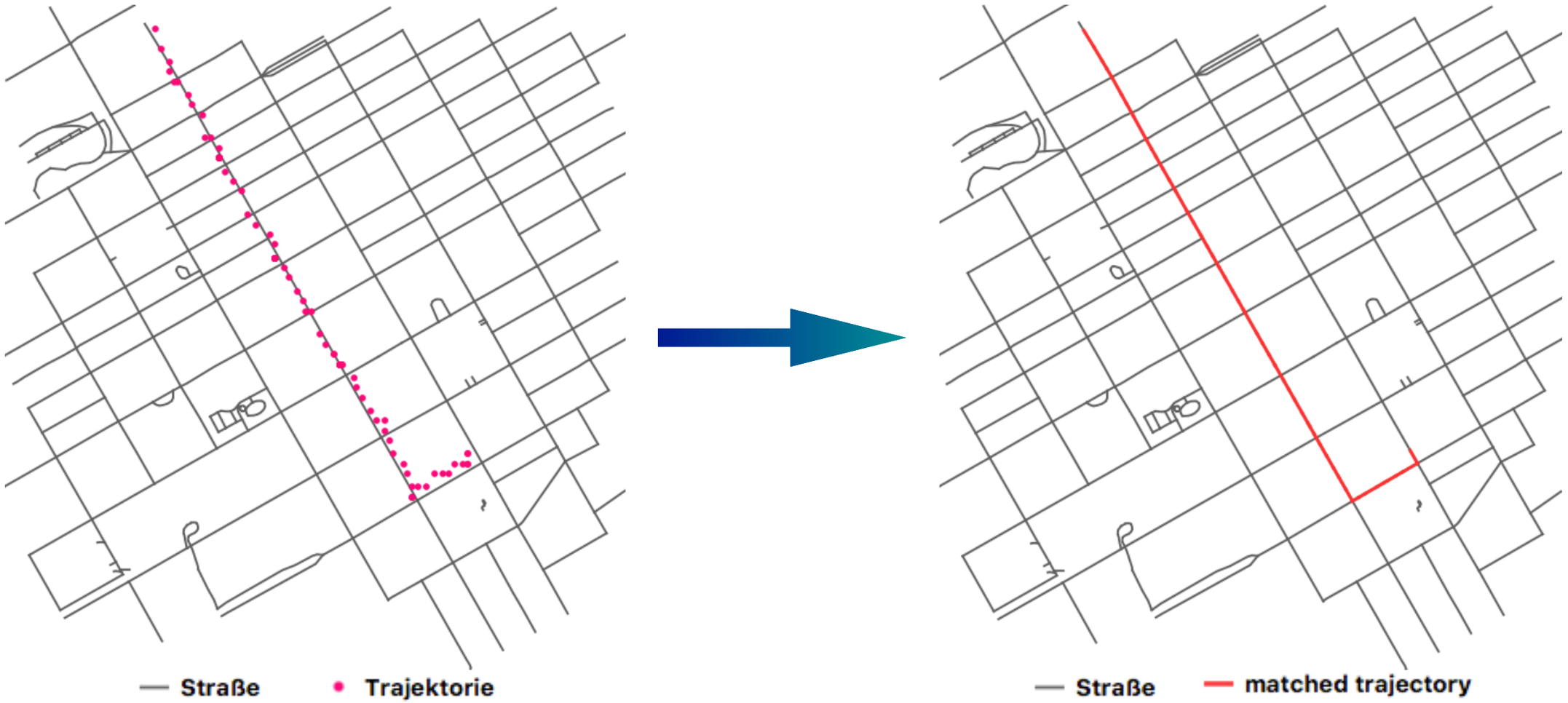
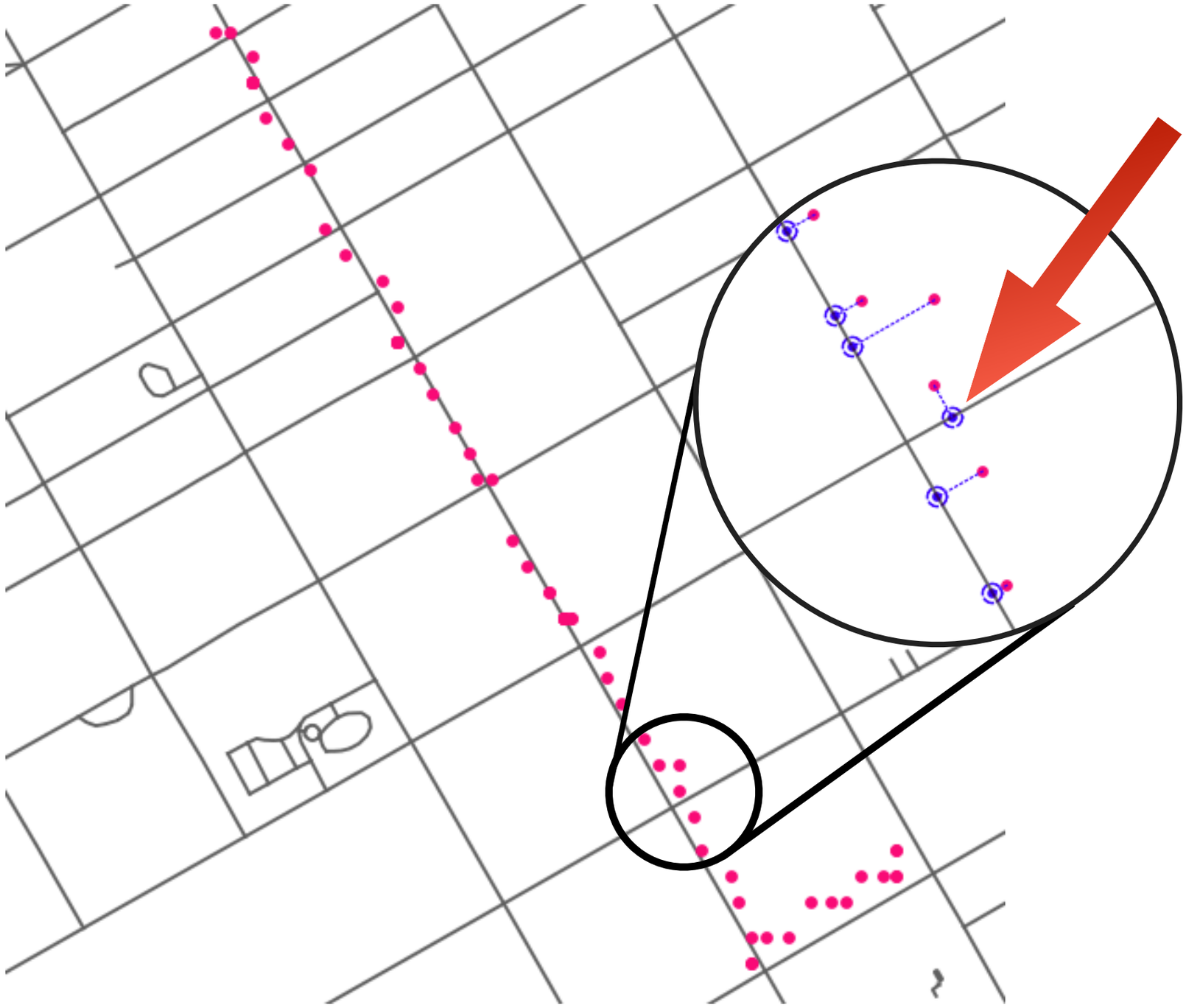


Abgleich einer Trajektorie mit einem Straßennetz in QGIS

Christoph Jung, GIS Day 2019, Potsdam


Straße
Trajektorie
Straße
matched trajectory


Straße
Trajektorie

Hidden Markov Map Matching Through Noise and Sparseness

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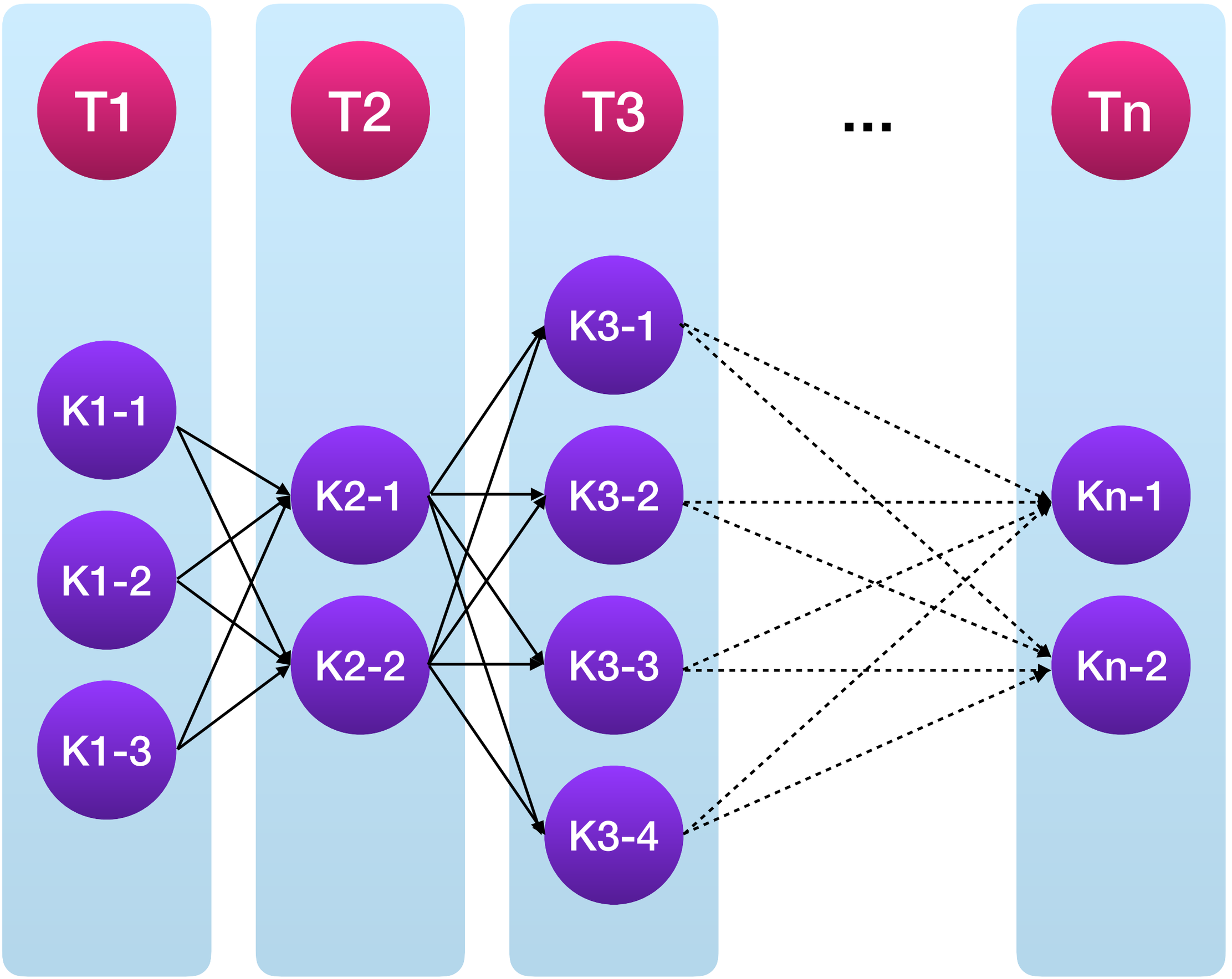
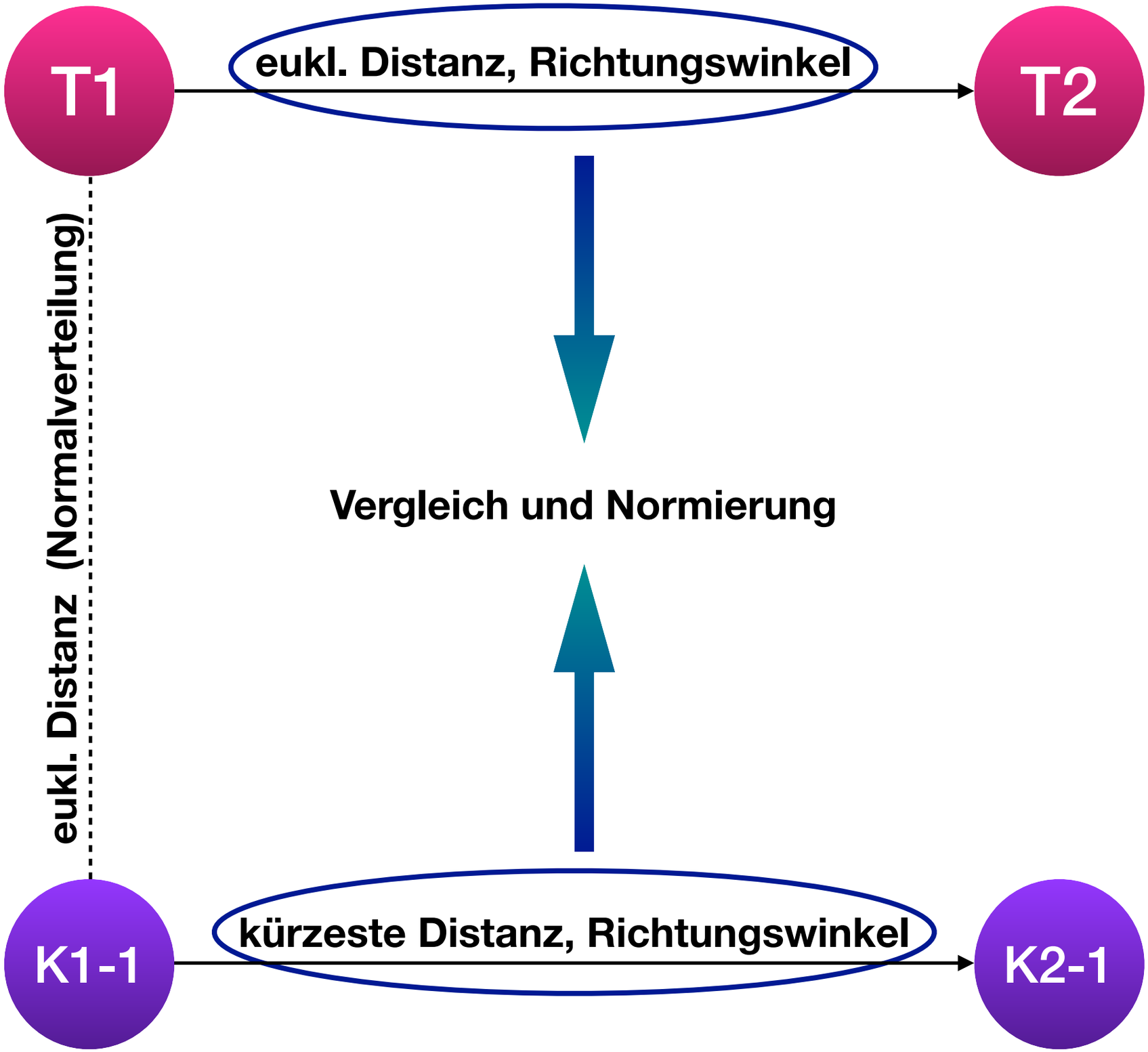
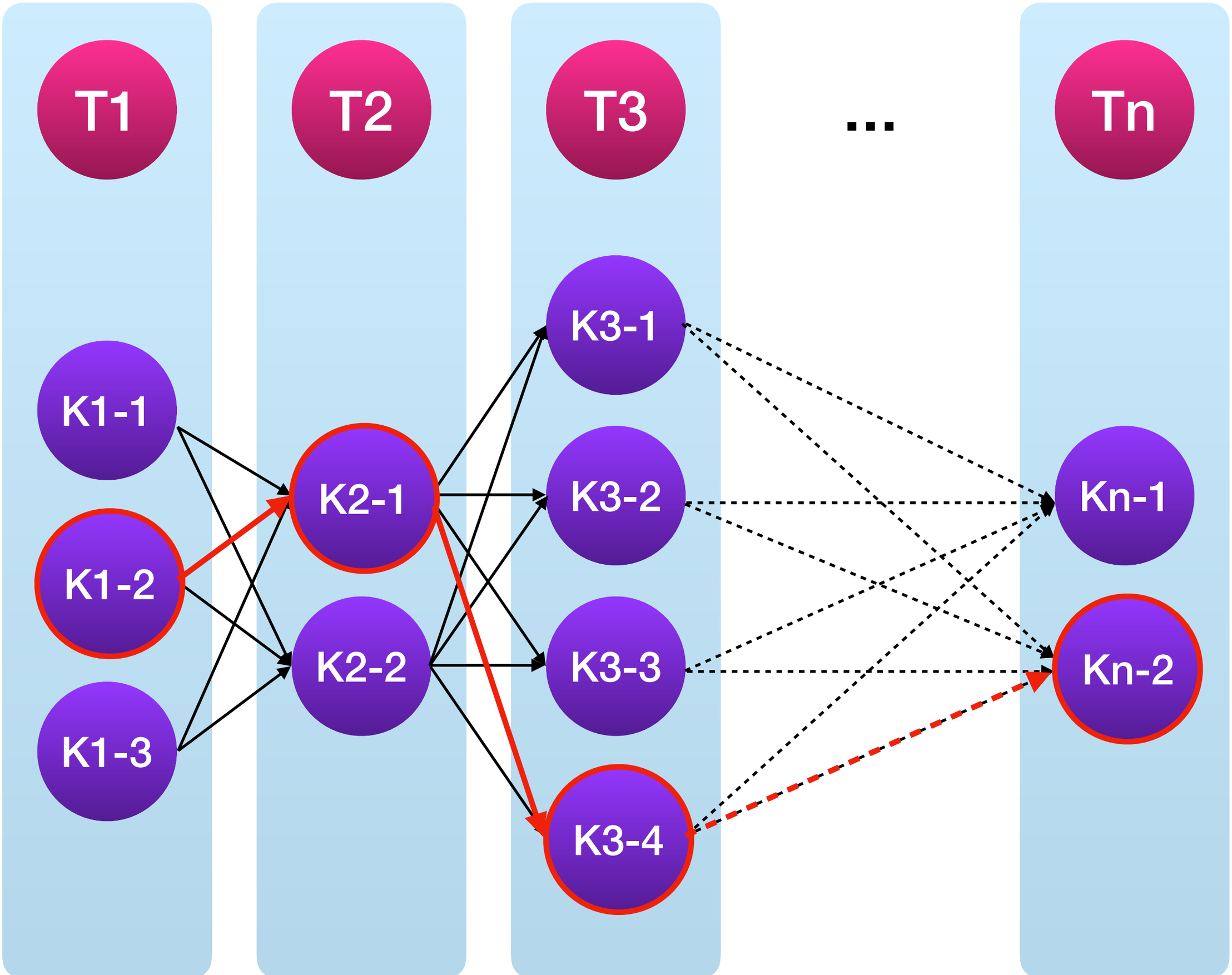
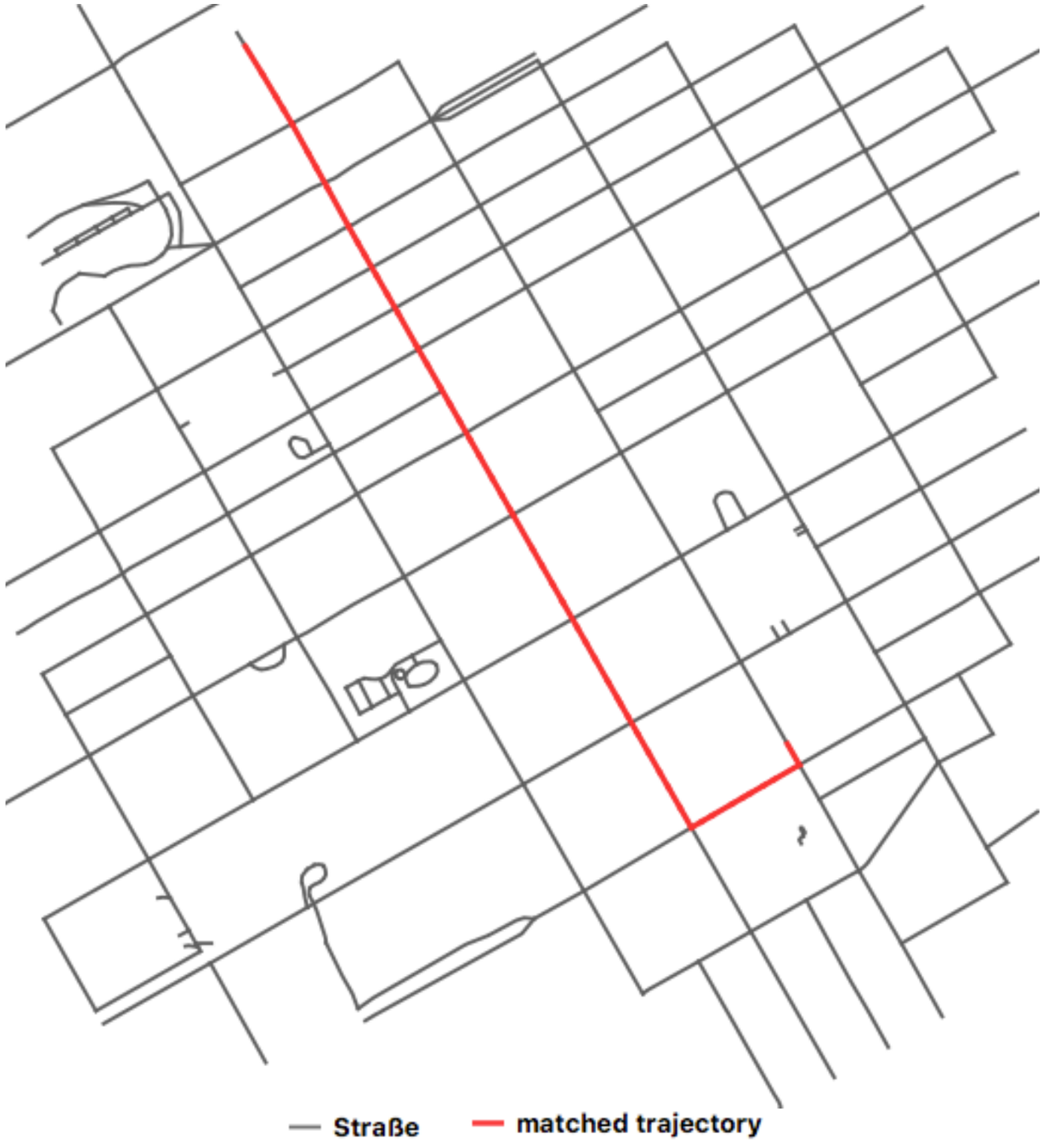
ABSTRACT

The problem of matching measured latitude/longitude points to roads is becoming increasingly important. This paper describes a novel, principled map matching algorithm that uses a Hidden Markov Model (HMM) to find the most likely road route


T1
T2
T3
...
Tn
K1-1
K1-2
K1-3
K2-1
K2-2
K3-1
K3-2
K3-3
K3-4
Kn-1
Kn-2


T1
eukl. Distanz, Richtungswinkel
T2
eukl. Distanz (Normalverteilung)
Vergleich und Normierung
K1-1
kürzeste Distanz, Richtungswinkel
K2-1


T1
T2
T3
...
Tn
K1-1
K1-2
K1-3
K2-1
K2-2
K3-1
K3-2
K3-3
K3-4
Kn-1
Kn-2


Straße
matched trajectory

einfache Installation

langsame Laufzeit

Notwendigkeit für Algorithmen zur Vorprozessierung

https://github.com/jagodki/Offline-MapMatching

https://plugins.qgis.org/plugins/Offline-MapMatching

agit

https://gispoint.de/fileadmin/user_upload/paper_gis_open/AGIT_2019/537669014.pdf

Vorführung des Plugins