

# Temporal Contact Graph Reveals the Evolving Epidemic Situation of COVID-19

## File list:

1. Temporal\_contact\_graph.txt
2. Confirmed\_day.txt
3. wh\_daily\_confirmed.npy

## Description of the dataset

The data we use in the analysis is a temporal contact graph, which quantifies the daily contacts between 16,647 confirmed cases and 562,280 contacted individuals from 1 January, 2020 to 28 February, 2020. For privacy preservation, we do not have access to the raw location related data, and the temporal contact graph was constructed and provided by the Westlake Institute of Data Intelligence and her collaborated location-based service (LBS) providers upon our requests. The confirmed cases who have no contact data uploaded are not included in these files.

**Temporal\_contact\_graph.txt** has 10,269 confirmed cases and 519,400 contacted individuals with 2,464,766 edges between them. The edges represent their encounters during one day and the number of times they contacted is the weight of the edges.

With format (‘|’ is the separator):

day susceptible individual confirmed case number of contacts
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Sample:

20200113 C0DBB5B3CDB1A0CB50FACAE245059D3B 224A777CADCD5B800A8B200CE7C25710 1
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**Confirmed\_day.txt** contains the date of confirmation for the infected.

With format (‘|’ is the separator):

confirmed case confirmed day
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Sample:

5F594CB2DEE68138AB8EDF240292807A 20200131
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**wh\_daily\_confirmed.npy** contains the number of daily confirmed cases in Wuhan.