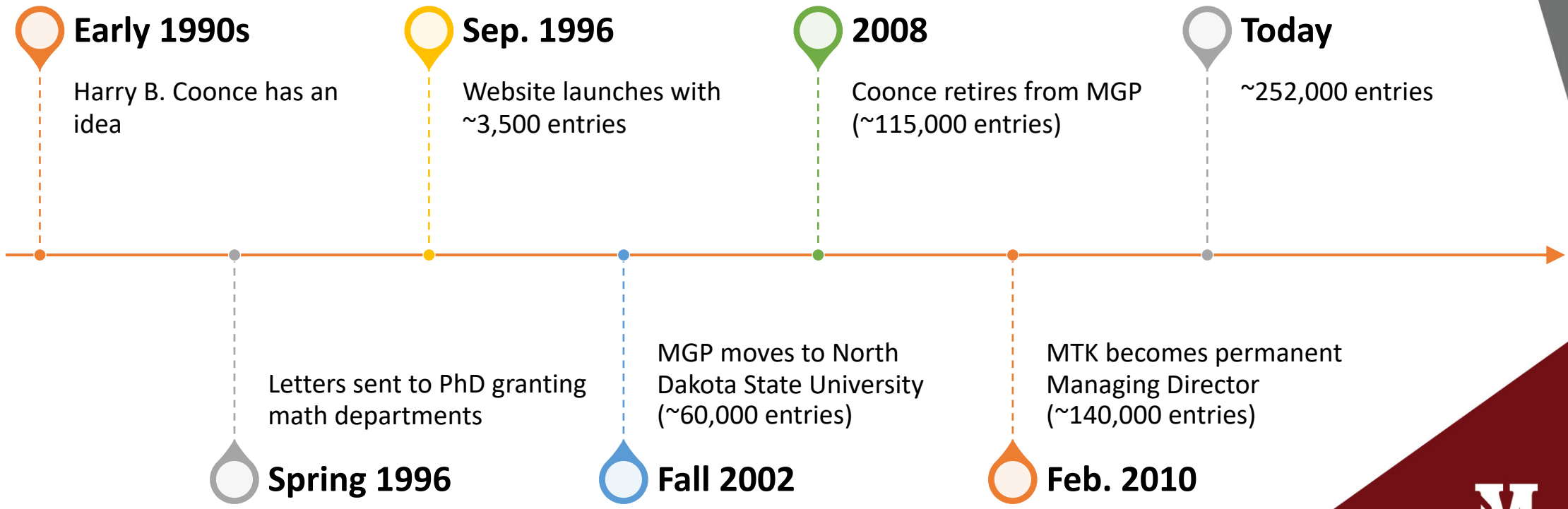
The Mathematics Genealogy Project as a Data Set

Mitchel T. Keller

Morningside College and Mathematics Genealogy Project

MGP History



MORNINGSIDE COLLEGE

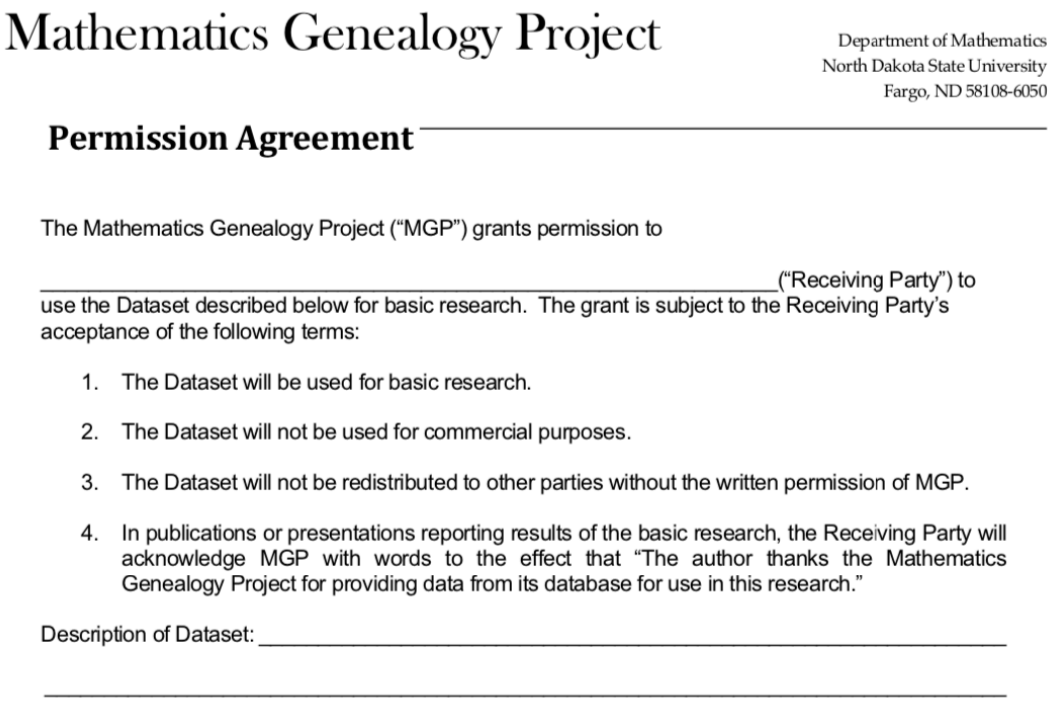
The Data

- Academic
  - Name
  - MR Author ID
  - St Andrews Bio link
- Degree
  - Academic ID
  - Thesis title
  - Year
  - Math Subject Class
  - Degree Type
- Country
  - Name
- University
  - Name
  - Country ID
- Degree grant
  - Degree ID
  - University ID
- Advising
  - Advisor ID
  - Advisee ID
  - Advice type

MORNINGSIDE COLLEGE

Using the Data

- Fill out form
- Upload via web form
- Hope MTK has time to reply
- Prolonged discussion about data format
- Finally get data



Mathematics Genealogy Project

Department of Mathematics
North Dakota State University
Fargo, ND 58108-6050

Permission Agreement

The Mathematics Genealogy Project ("MGP") grants permission to

_____("Receiving Party") to use the Dataset described below for basic research. The grant is subject to the Receiving Party's acceptance of the following terms:

1. The Dataset will be used for basic research.
2. The Dataset will not be used for commercial purposes.
3. The Dataset will not be redistributed to other parties without the written permission of MGP.
4. In publications or presentations reporting results of the basic research, the Receiving Party will acknowledge MGP with words to the effect that "The author thanks the Mathematics Genealogy Project for providing data from its database for use in this research."

Description of Dataset: _____

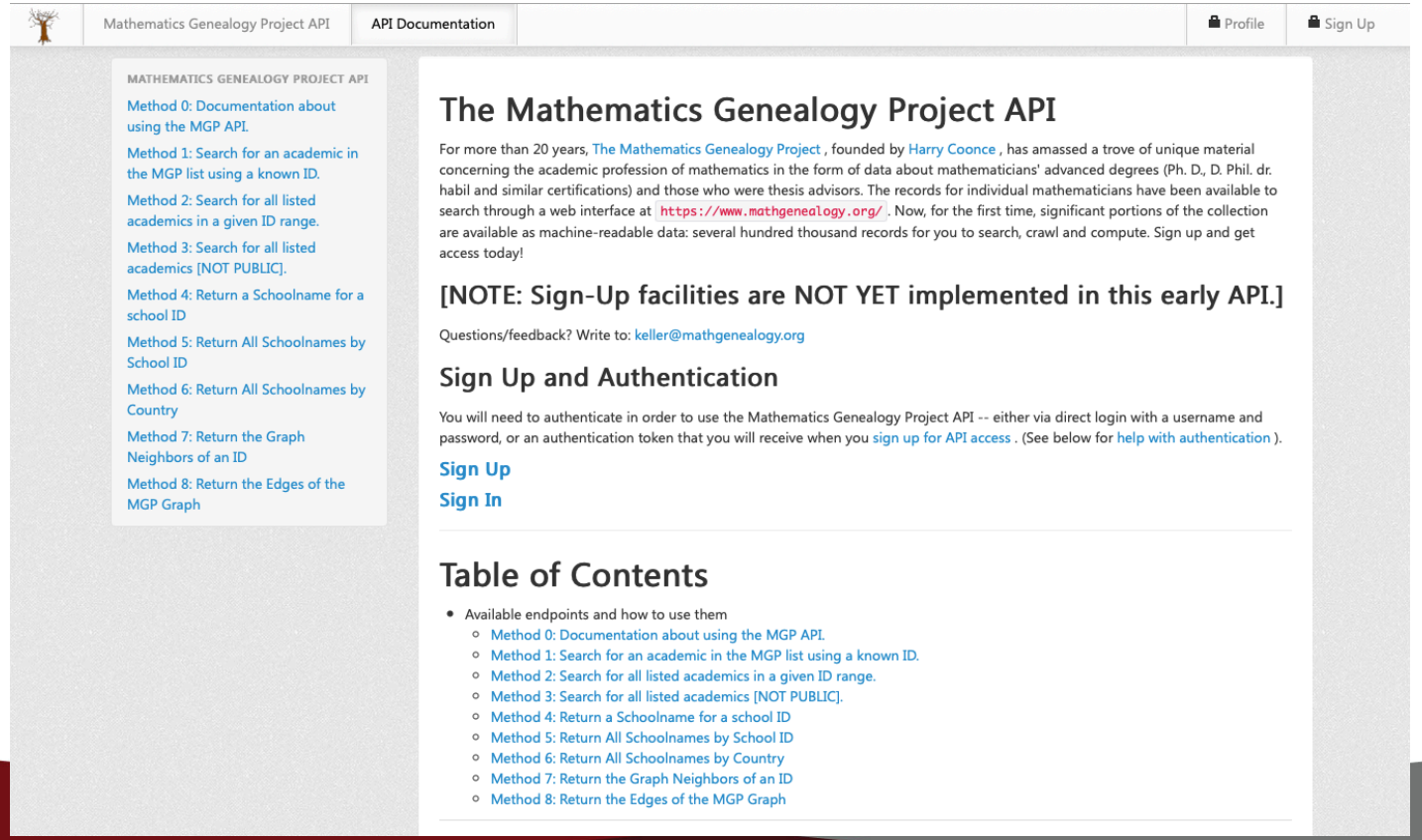
_____

(Past) Time for an API

- Kudos to Patrick Ion for the heavy lifting
- Pre-release demo today
- Data license: CC-BY-SA-NC

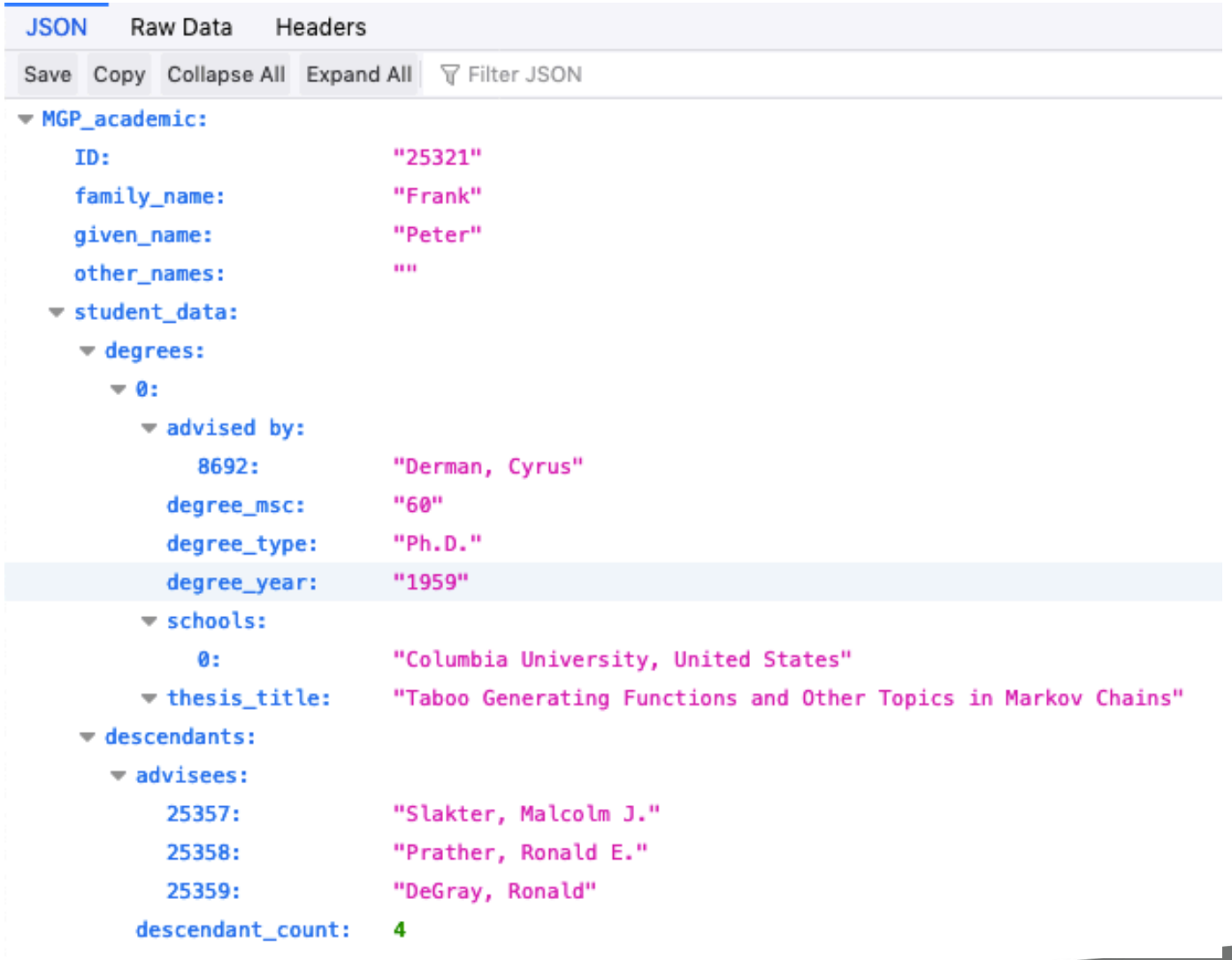
Method 0: Documentation

Live link



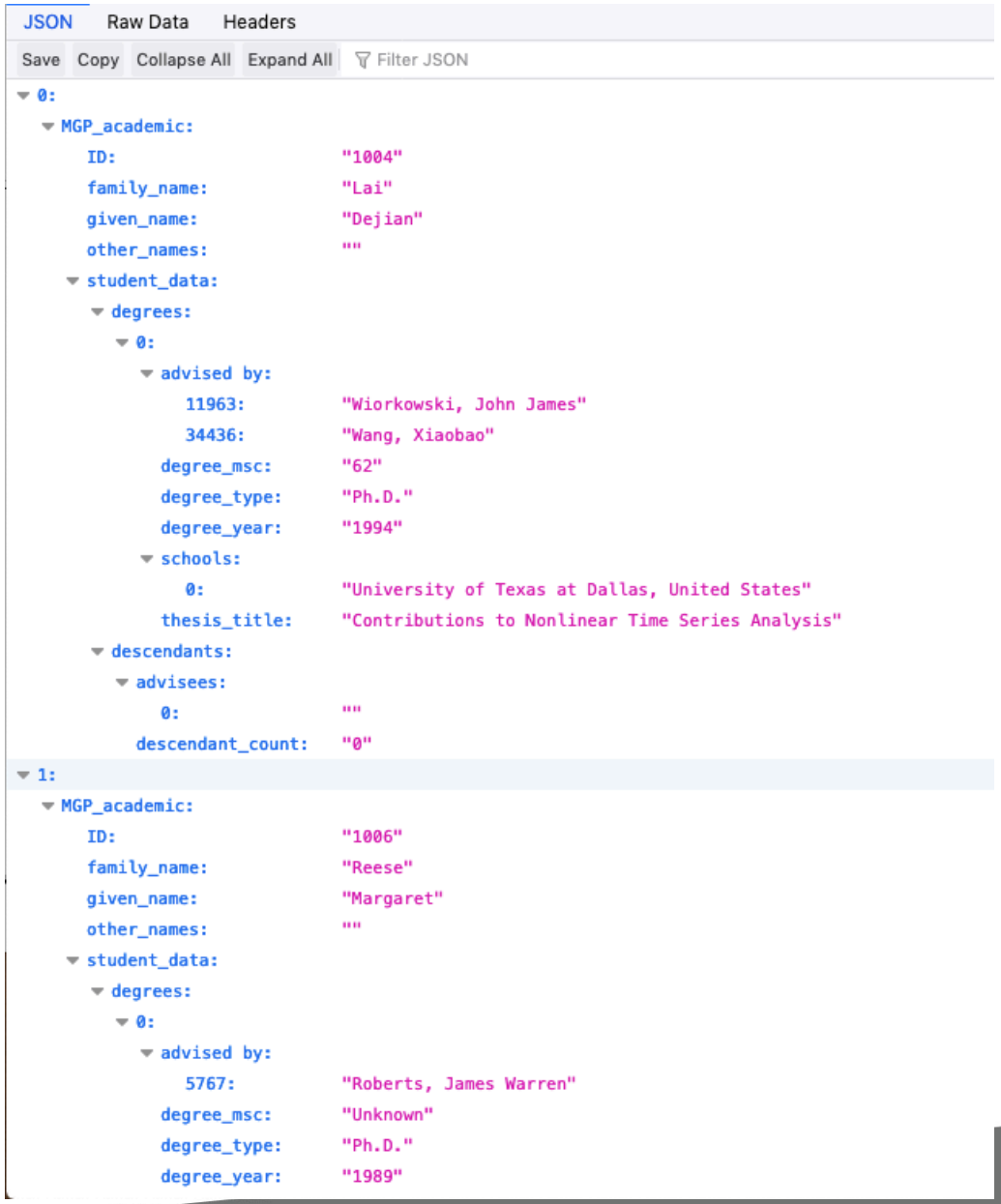
Method 1: Academic Info

Live link



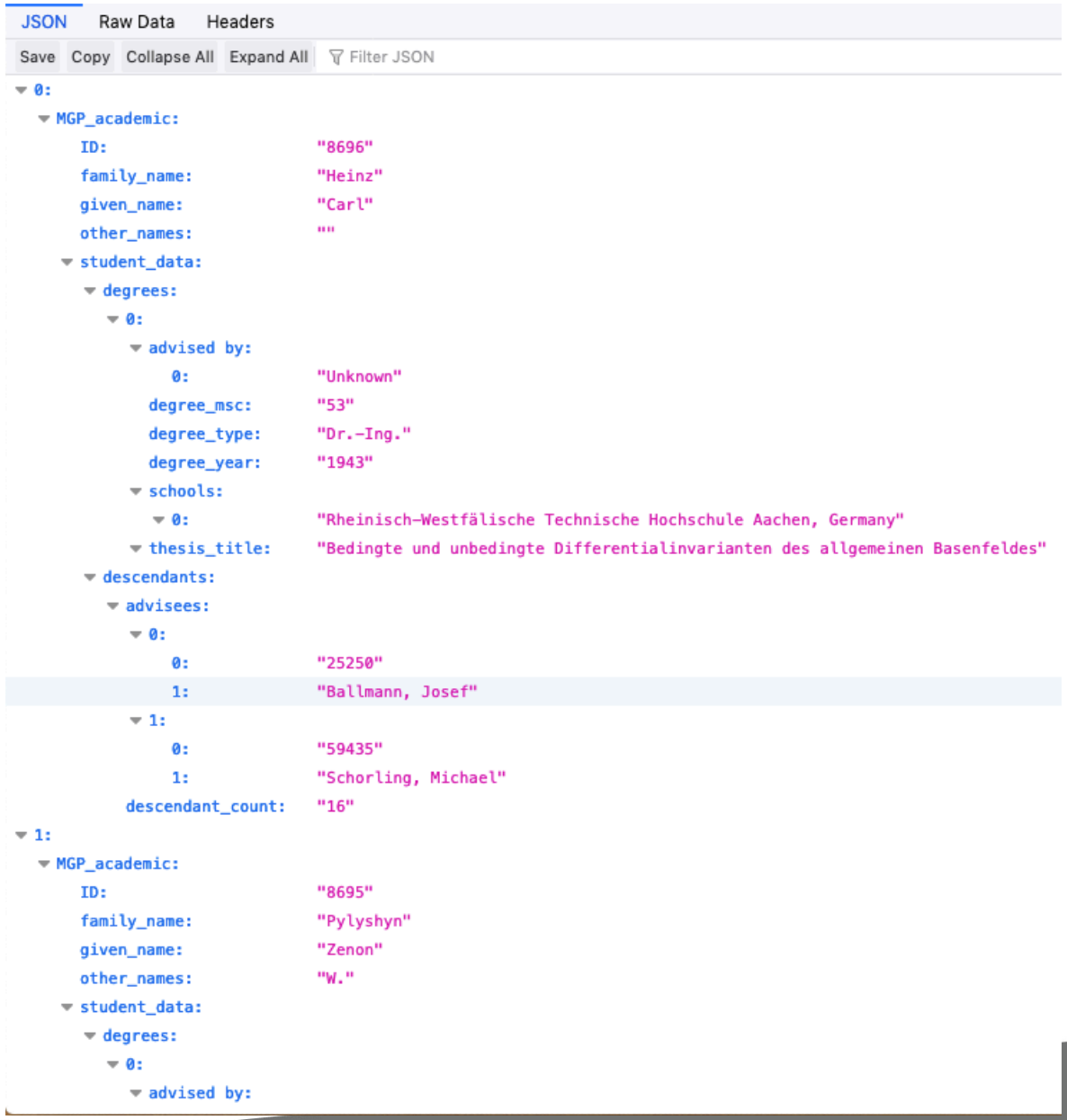
Method 2: ID Range

Live link



Method 3: All Records (Not public)

Live link



Method 4: School Info

Live link

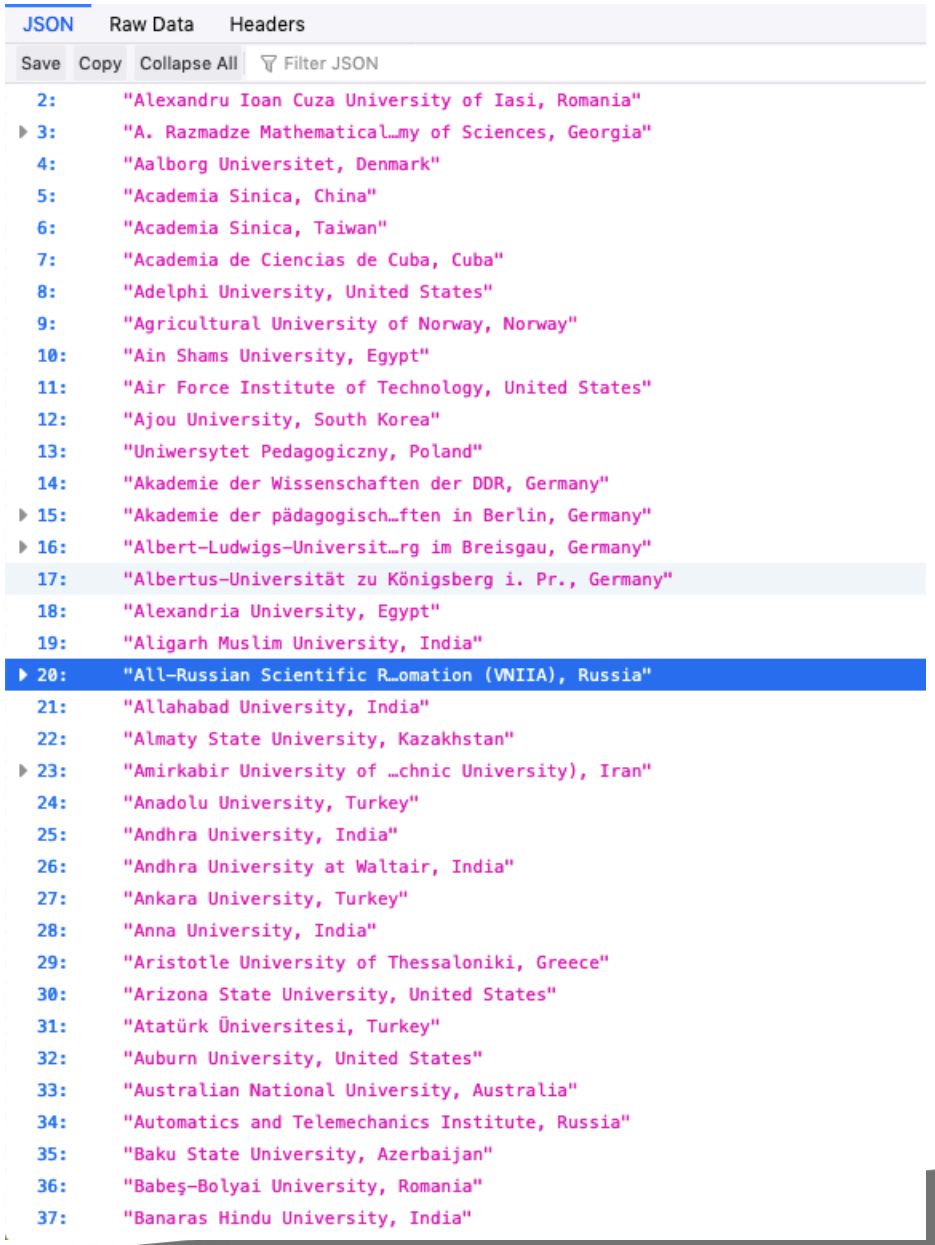
School key: school name, country

122: Donetsk University, Ukraine

For a full list use the endpoint `/api/v2/MGP/schoolnames/`, although this may take some time.

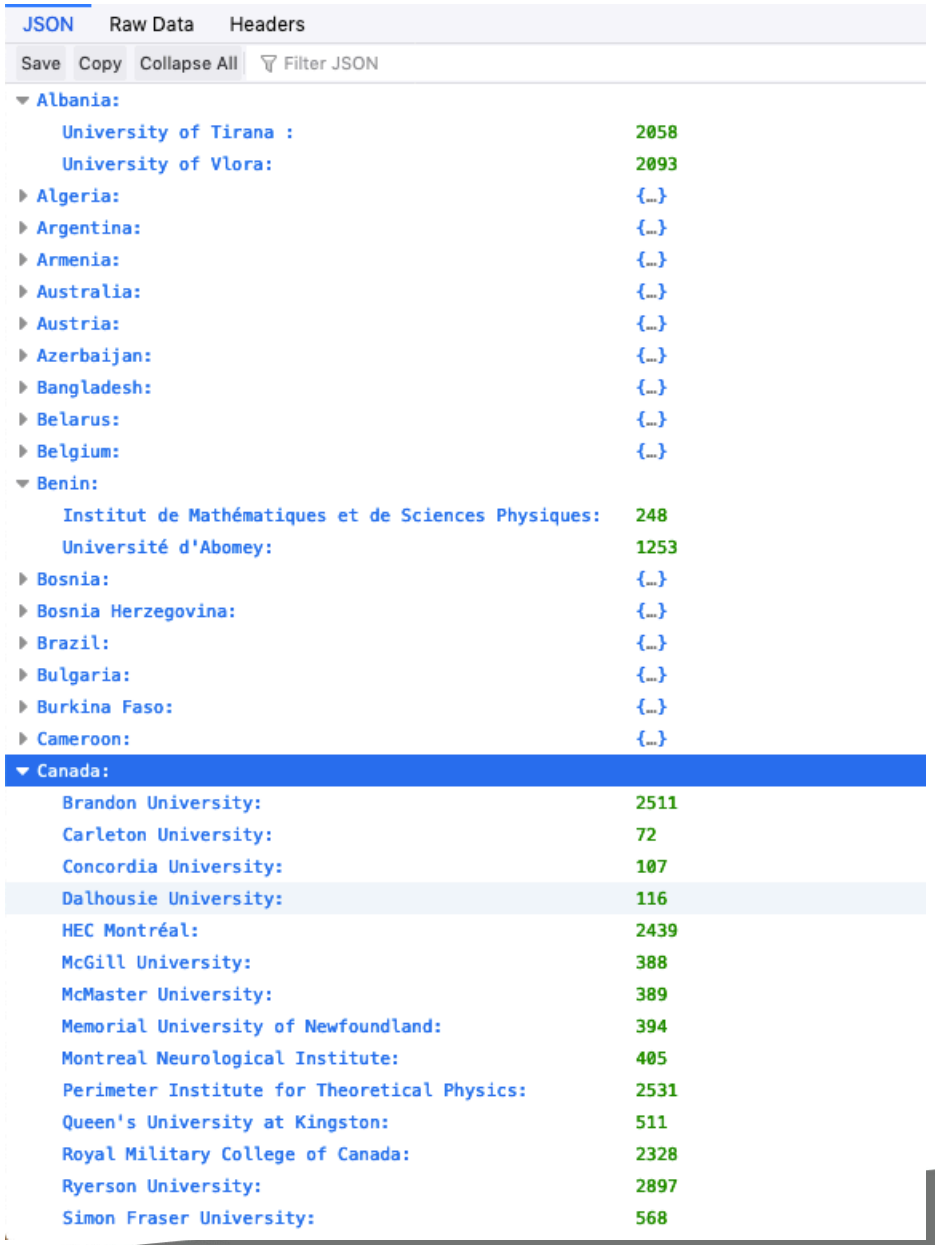
Method 5: All Schools

Live link



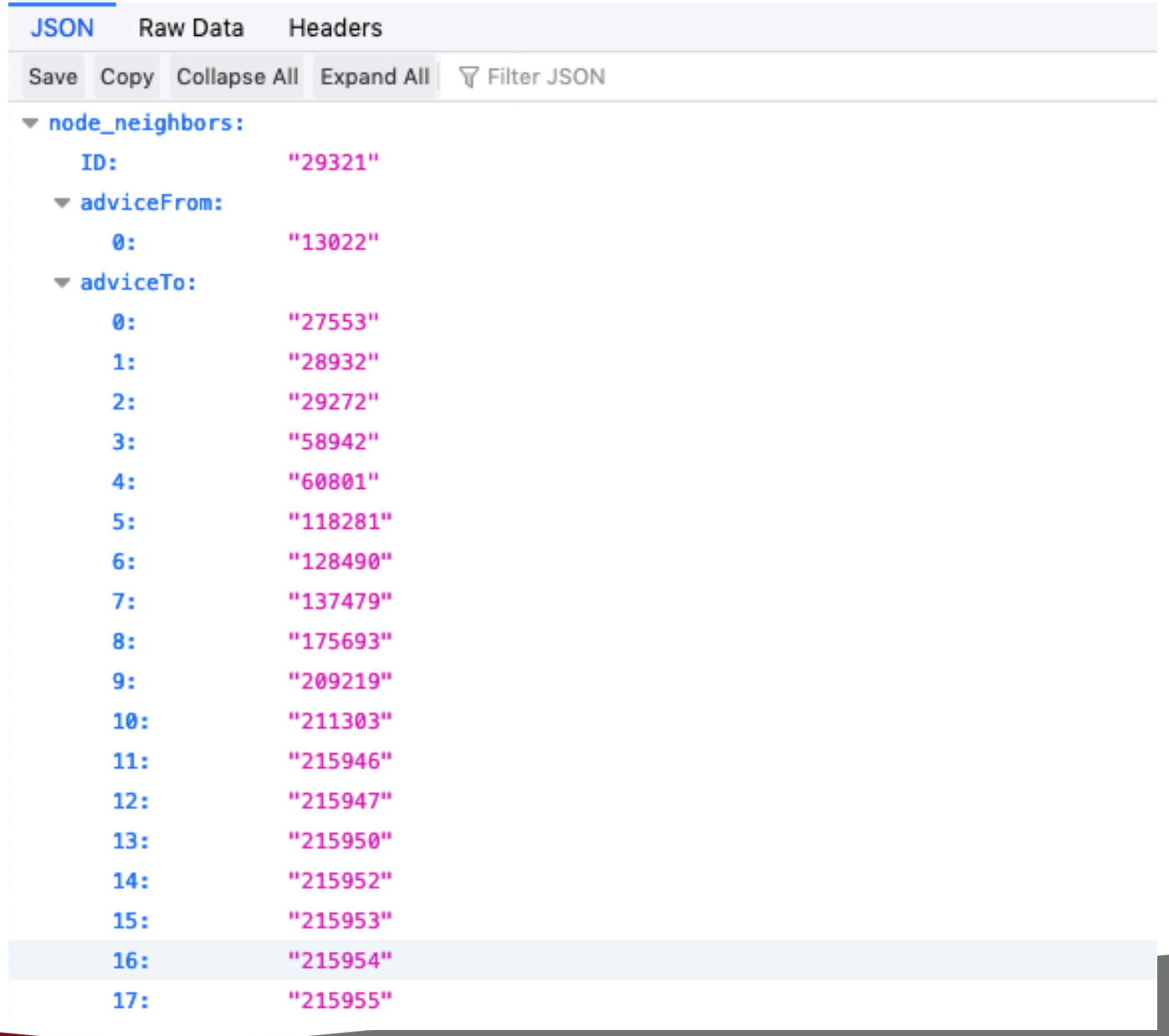
Method 6: Schools by Country

Live link



Method 7: Graph Neighbors

Live link



Method 8: Full Graph

Live link


```
{
  "count_edges": 273022,
  "count_nodes": 243074,
  "directed_edges": [
    [
      12025,
      37587
    ],
    [
      37587,
      149783
    ],
    [
      258,
      3
    ],
    [
      239,
      4
    ],
    [
      258,
      5
    ],
    [
      258,
      6
    ],
    [
      281,
      7
    ],
    [
      258,
      8
    ],
```

To Do

JSON OUTPUT FOR SCHOOL INFO

XML OUTPUT FOR ALL

ERRORS

HTTPS SUPPORT

SIGN UP AND AUTHENTICATION

What should be different?

Your Input

What should be added?

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The Mathematics Genealogy Project is a service of North Dakota State University and the American Mathematical Society.

NDSU NORTH DAKOTA STATE UNIVERSITY

AMS AMERICAN MATHEMATICAL SOCIETY
Advancing research. Creating connections.