

EventKG+BT:

Generation of Interactive Biography Timelines from a Knowledge Graph

Simon Gottschalk, Elena Demidova

CHALLENGE AND GOAL

- High amount of event-centric information about notable accomplishments and important events in the life of people of public interest
- Goal: create concise and interactive spatio-temporal representations of biographies from a knowledge graph
- Predict the relevance of potential timeline entries found in **EventKG** by learning from textual biographies

SCENARIO

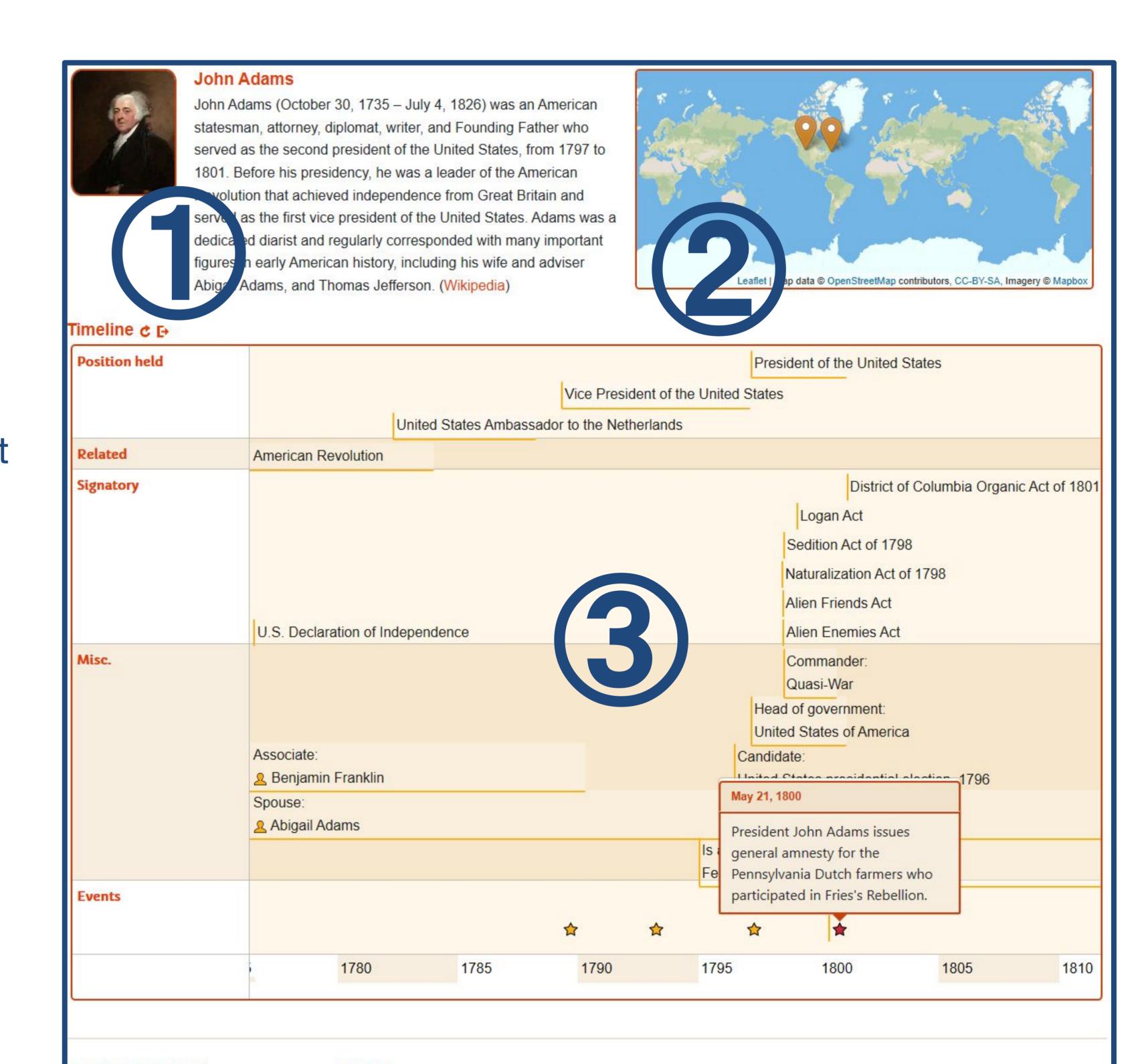
- Example question: "What were the notable accomplishments in the life of John Adams?"
- Tedious and time-consuming task that usually requires close reading of long encyclopedic or biographical sources
- EventKG+BT enables exploration of personal biographies based on concise biography timelines

TIMELINE GENERATION

- Extract a set of potential timeline entries from EventKG, for example:
 - John Adams, born, 30 Oct 1735
 - John Adams, marriedTo, Abigail Adams
 [25 Oct 1764 28 Oct 1818]
 - John Adams, child, John Quincy Adams
 [11 Jul 1767 4 Jul 1826]
- Distant supervision approach that identifies relevant temporal relations in biography texts
- SVM classifier on features such as
 - person type
 - property
 - relatedness of the object to the person

THE INTERFACE

- 1 Wikipedia biography
 - Short textual biography
- 2 Event map
 - Locations related to timeline entries
- 3 Biography timeline
 - Timeline grouped by property labels
- 4 Related people
 - Most important people in the person's life
- (5) Events
 - Textual events from EventKG



eventkg-biographies.l3s.uni-hannover.de



Related Persons

A Thomas Jefferson

 A John Quincy Adams

A Thomas Pinckney

Abigail Adams

· A Abigail A

Events

the United States Senate.

votes, with George Clinton receiving 50.

participated in Fries's Rebellion.



 <u>1636</u>: The first American ancestor of John Adams, Henry Adams, emigrates to Massachusetts.

Mar 4, 1801: Thomas Jefferson is sworn in as the third President of the United States.

receives all 132 electoral votes for President, and incumber

 • Dec 7, 1796: The U.S. Electoral College meets to elect John

signing of the United States Declaration of Independence.

◆ Apr 21, 1789: John Adams takes office as the first Vice President of the United States, and begins presiding over

• ★ Nov 6, 1792: The second United States presidential election is and Incumber t President George Washington

. ★ May 21, 1800: President John Adams issues general amnesty for the Pennsylvania Dutch farmers who

• 🖈 Jul 4, 1826: Former U.S. Presidents Thomas Jefferson and John Adams both die, on the 50th anniversary of the



