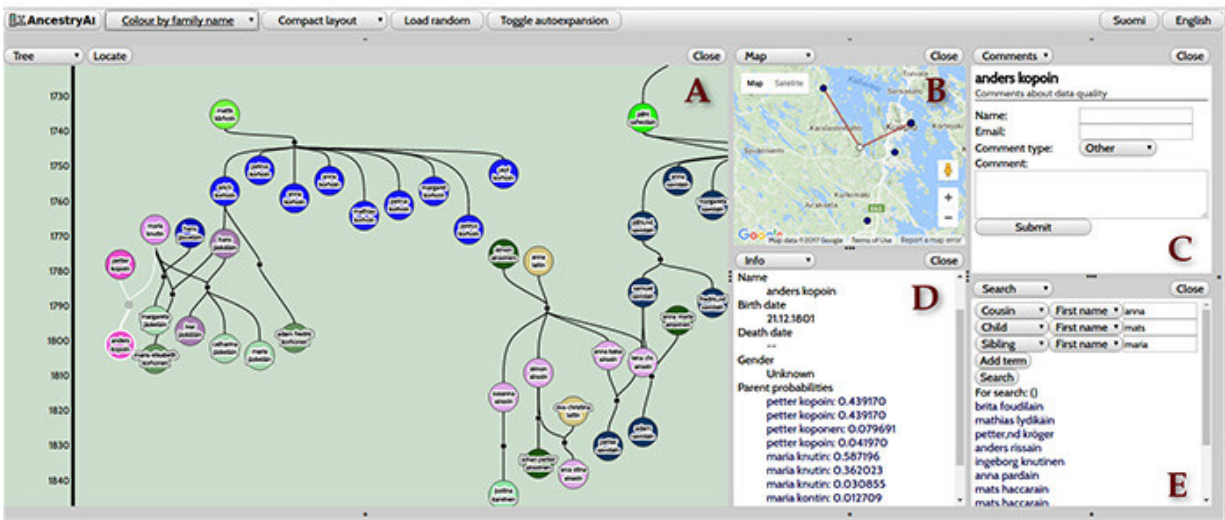


# Algorithm automatically searches for a child's most probable parents and generates family trees

March 16 2017



Credit: Aalto University

Aalto University doctoral student Eric Malmi has developed a family tree algorithm called AncestryAI. The algorithm looks for links between 5 million baptisms from the end of the 17th to the mid-19th century and partly to the beginning of the 20th century. To investigate your own

family roots, you need to know about your own ancestors, because baptisms in the last hundred years are not public information.

'The data is derived from parish registers. In the HisKi project, organized by the Genealogical Society of Finland, volunteer genealogists are entering information from registers into a database. Besides baptisms, the data includes marriages, burials and moves, although the algorithm is not yet taking advantage of this information. There are gaps in the material, for example because of churches burning down, but nevertheless, it is unusually comprehensive on an international level, including information for several centuries,' said Malmi.

The [family tree](#) algorithm automatically searches for a child's most probable parents and creates family trees based on this. The algorithm gives several options based on the parents' date and place of birth and similar names. The algorithm takes about half an hour to link all the records in the data.

'The search path can also be used to find out whether two people are related to each other. Many people might be interested to know, for example, whether they are related to the great Finnish author Aleksis Kivi or other famous historical figures. Nevertheless, we need to consider the fact that if the path is long and all the links are uncertain, it is very unlikely that the whole path is correct,' Malmi pointed out.

AncestryAI users can leave comments on the accuracy of the algorithm in inferring relationships. Using the comments, the algorithm can be trained to determine the relationships more accurately, and comments are displayed for other users.

'It would be really interesting to have a family tree covering the whole of Finland, because it could also be used to study wars, epidemics, the influence of and changes in the class society. This is not possible yet,

because, for example, the algorithm does not make use of communion books. So the [algorithm](#) is not intended to replace the work of genealogists, but to help them by speeding up their work, and somewhat improving the accuracy of their results,' Malmi concluded.

**More information:** AncestryAI can be accessed at [ancestryai.cs.hut.fi/](https://ancestryai.cs.hut.fi/)

Provided by Aalto University

Citation: Algorithm automatically searches for a child's most probable parents and generates family trees (2017, March 16) retrieved 27 April 2024 from <https://phys.org/news/2017-03-algorithm-automatically-child-probable-parents.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.