

# British Library Labs: Competition (2016) winners

Find out more at <http://labs.bl.uk>

The [Labs Competition](#) looks for **transformative project ideas** which use the British Library's [digital collections and data](#) in new and exciting ways. The project is supported by the [Andrew W. Mellon foundation](#).

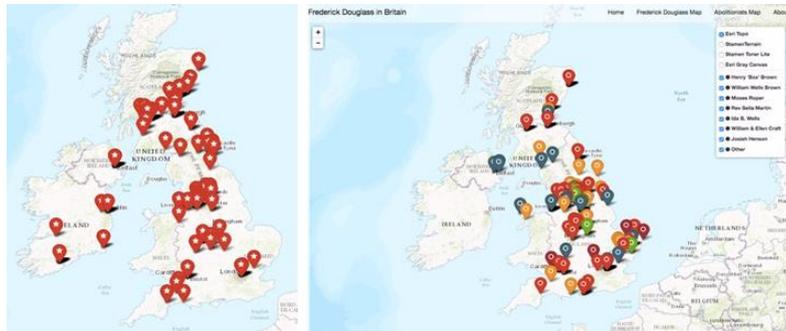


## Black Abolitionists and their presence in Britain

Hannah-Rose Murray, PhD student at the University of Nottingham

Maps from Hannah-Rose's website

The project focuses on African American lives, lectures and experiences in Britain between 1830–1895. By assessing Black Abolitionist speeches in the British Library's Nineteenth Century Newspaper Collection and using the British Library's Flickr Commons collection to illustrate, the project has illuminated their performances and how their lectures reached nearly every corner of Britain. For the first time, the location of these meetings has been mapped and the number and scale of the lectures given by black abolitionists in Britain has been evaluated, allowing their hidden voices to be heard and building a more complete picture of Victorian London for us. The project findings can be found on Hannah-Rose's website [www.frederickdouglassinbritain.com](http://www.frederickdouglassinbritain.com).



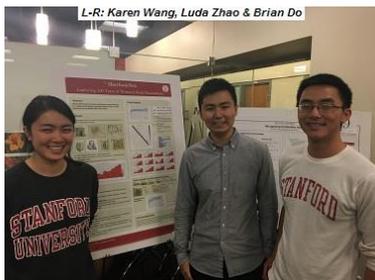
**Hannah-Rose Murray** is a PhD student with the Department of American and Canadian Studies, University of Nottingham. Her AHRC/M3C-funded PhD focuses on the legacy of formerly enslaved African Americans on British society and the different ways they fought British racism. Hannah-Rose received a first class Masters degree in Public History from Royal Holloway University and has a BA History degree from University College London (UCL). In Nottingham, Hannah-Rose works closely with the Centre for Research in Race and Rights and is one of the postgraduate directors of the Rights and Justice Research Priority Area, which includes the largest number of scholars (700) in the world working on rights and justice.

## SherlockNet: Using Convolutional Neural Networks to automatically tag and caption the British Library Flickr collection

Karen Wang and Luda Zhao, Masters students at Stanford University, and Brian Do, Harvard Medicine MD/PhD student

SherlockNet web interface

Machine learning can extract information and insights from data on a massive scale. The project developed and optimised Convolutional Neural Networks (CNN), inspired by biological neural networks in the brain, in order to tag and caption the British Library's Flickr 1 million collection. In the first step of the project, images were classified with general categorical tags (e.g. "maps", "architecture"). This served as the basis for the development of new ways to facilitate rapid online tagging with user-defined sets of tags. In the second stage, automatically generate descriptive natural-language captions were provided for images (e.g. "A man in a meadow on a horse"). This computationally guided approach has produced automatic pattern recognition which provides a more intuitive way for researchers to discover and use images. The tags and captions are being made accessible and searchable for the public through a web-based interface and text annotations will be used to globally analyse trends in the Flickr collection over time. Visit the website: <http://bit.ly/sherlocknet>



L-R: Karen Wang, Luda Zhao & Brian Do

**Karen Wang** is a senior studying Computer Science at Stanford University, California and she also has an Art Practice minor. Karen is interested in the intersection of computer science and humanities research, so this project is near and dear to her heart! She will be continuing her future studies at Stanford in CS, Artificial Intelligence track.

**Luda Zhao** is currently a Masters student studying Computer Science at Stanford University, living in Palo Alto, California. He is interested in using machine learning and data mining to tackle tough problems in a variety of real-life contexts, and he's excited to work with the British Library to make art more discoverable for people everywhere.

**Brian Do** grew up in sunny California and is a first-year MD/PhD student at Harvard Medical School. Previously he studied Computer Science and biology at Stanford. Brian loves using data visualisation and cutting edge tools to reveal unexpected things about sports, finance and even his own text message history.