Panoptes, A Project Building Tool for Citizen Science

Alex Bowyer, Chris Lintott, Greg Hines, Campbell Allen, Ed Paget

Zooniverse / University of Oxford, UK / Adler Planetarium, Chicago

Introducing the Zooniverse and our new Project Builder

As the world's largest and most popular platform for citizen science, we are approached by researchers from diverse fields: from particle physics to botany, from art history to marine biology, to build projects for all manner of human computation tasks including annotation, species identification, transcription, audio/video analysis and image marking. We are a small team with limited resources so, in 2015, as part of our vision to accelerate scientific discovery by enabling researchers to help themselves, we launched the new **Zooniverse**. **org**, which introduces **Panoptes**, our web-based tool that lets you create a citizen science project in minutes.

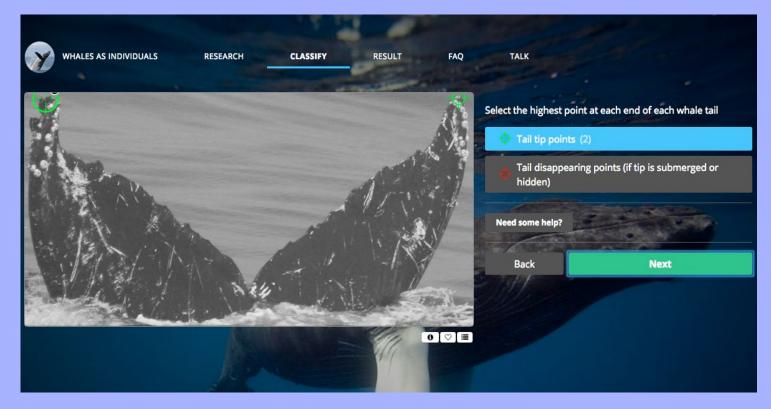
Zooniverse Stats

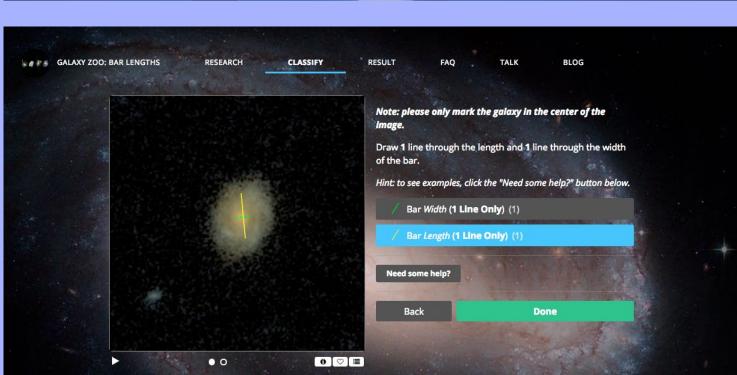
- **52 projects** launched since 2007
- over 1.3 million registered users
- over 330 million classifications
- over 100 peer-reviewed papers
- 25 man-years of effort last year

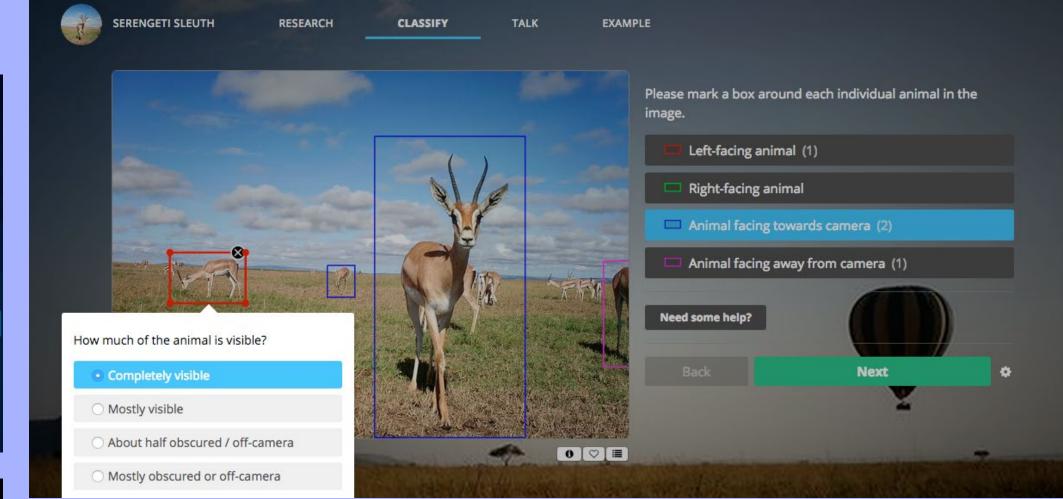
New Features in Panoptes

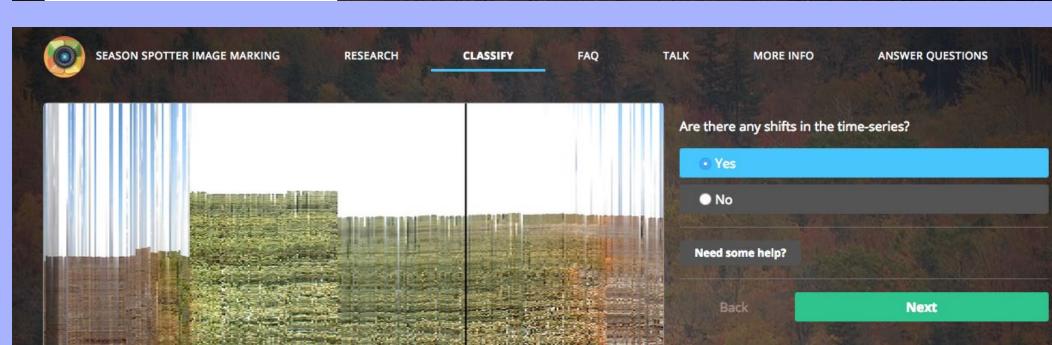
- Build your own Zoo project
- Use your images and media
- Free hosting (with limits)
- Custom workflows
- Ask questions, collect annotations
- Drawing tools point, line, circle...
- Offer contextual help and FAQs
- Store your metadata in our DB
- Specify retirement thresholds
- Download results as CSV
- Build community with Talk boards
- Users can message each other
- Use markdown editing

Sample Projects

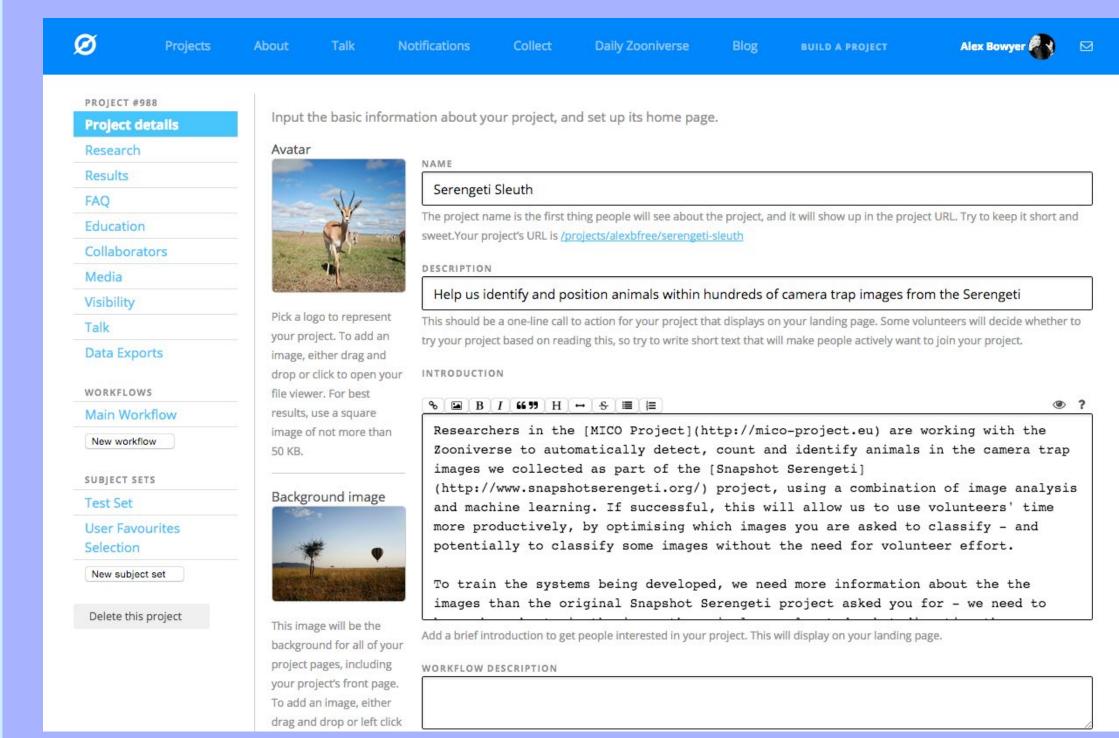




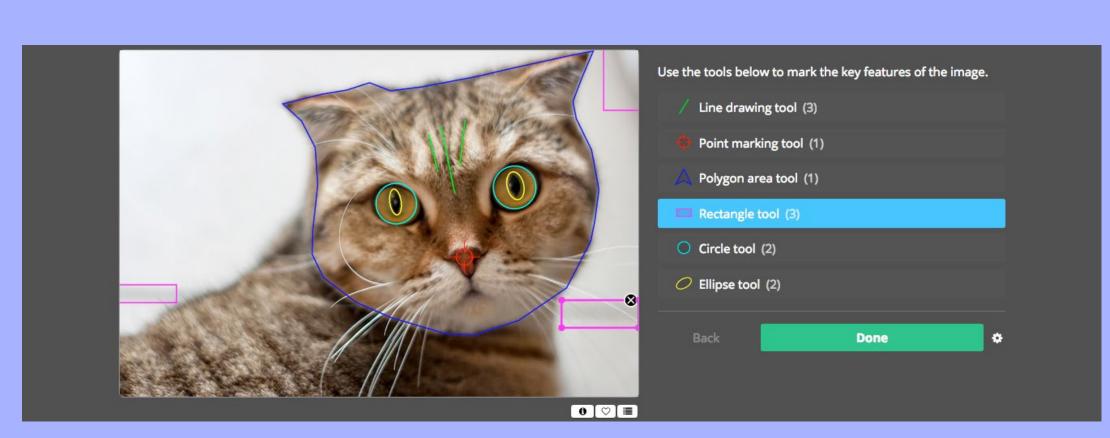




How to Create Your Own Citizen Science Project with Panoptes



Screenshot from Panoptes, the Zooniverse Project Builder



Demonstration of the six drawing tools available for your tasks

- 1. Log on to **zooniverse.org**
- 2. Click "Build A Project"
- 3. Create your workflow:
 - Define question tasks
 - Define drawing tasks
 - Define any subtasksConnect the tasks together
- 4. Upload your media
- 5. Add documentation & help
- 6. Test your project internally
- 7. Iterate and improve your design

Once you are happy with your project, you can:

- Launch the project to your own volunteers - no approval needed
- Submit your project for quality review by our panel of experienced project building volunteers.
- Apply for full Zooniverse project status and public promotion by the Zooniverse.

Why use Panoptes?

Here's three scenarios where you will want to build a project with Panoptes:

1. Rapid Prototype Creation

Starting only with a set of images, create a new project from scratch in minutes. It will be immediately available to share via a unique Zooniverse URL. This is a great way to attract funding, convey your idea, or engage your students.

2. Generate ML Test/Training Data

If you are building a machine learning system, create a project to harness the power of the crowd to generate your training and test datasets for human-specialised tasks such as identifying species, emotions or contexts.

3. Filter and Clean Your Data

Do you have a dataset full of "misses", blanks or errors? If a human eye is required, you can create a simple Yes/No workflow and launch it to volunteers, allowing you to easily separate the wheat from the chaff and prep your data for your next project.







