



# Pedal



Esther Kwak | Des 157 | 3/16/17



# Topic Ideas

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## Variety of topics

### 3 topic ideas for ISEA

#### Topic 1: Visualization of animal species

D3.js is a powerful graphics visualization library that allows large data sets to be visualized in a manner that not only looks beautiful, but offers complexity and relevance to expose the critical parts of the data set. For the topic of Bio Creation/Data, a webpage detailing the extinction of animal species over time with d3.js, with a visualization of all the animal species and how they are connected, and how they are slowly becoming extinct because of global warming

#### Topic 2: The extinction of bees

A powerful website could be created to visualize the process of bees from pollinating plants to producing honey. These animations could be created by leveraging scrolling in html, to animate this process and expose the phenomena, which is the rapidly decreasing population of bees, which are so critical in the food chain.

#### Topic 3: Machine Learning

Machine Learning and Artificial Intelligence are beginning to be utilized in a lot of electronics, beginning with the introduction of siri, alexa, and reaching the point where autonomous cars are quickly becoming a reality. With this in mind, how dangerous can this become? An animated infographic could be show to expose the reality of autonomous driving or a similar epidemic of artificial intelligence/machine learning becoming more powerful, and force people to carefully question the decisions that autonomous driving/robotic algorithms make, which potentially can affect the future of the human race.

# Proposal

Narrow my idea

Focus on biking



**ISEA2017**

**23rd INTERNATIONAL SYMPOSIUM ON ELECTRONIC ART**

**XVI INTERNATIONAL IMAGE FESTIVAL**

**LEARNING CALL**

**1. Title**

Bike for a better world

**2. Duration (only workshops and tutorials)**

Half day \_\_\_ Full day \_\_\_

**3. Organizers and presenters' names and affiliations**

Esther Kwak, UC Davis

# 1.

The collage features a variety of infographic styles:

- Top Left:** A circular infographic titled "JERSEY" with a central gear icon and surrounding text.
- Top Center:** A circular infographic with a central gear icon and surrounding text.
- Top Right:** A circular infographic with a central gear icon and surrounding text.
- Middle Left:** A circular infographic with a central gear icon and surrounding text.
- Middle Center:** A circular infographic with a central gear icon and surrounding text.
- Middle Right:** A circular infographic with a central gear icon and surrounding text.
- Bottom Left:** A circular infographic with a central gear icon and surrounding text.
- Bottom Center:** A circular infographic with a central gear icon and surrounding text.
- Bottom Right:** A circular infographic with a central gear icon and surrounding text.

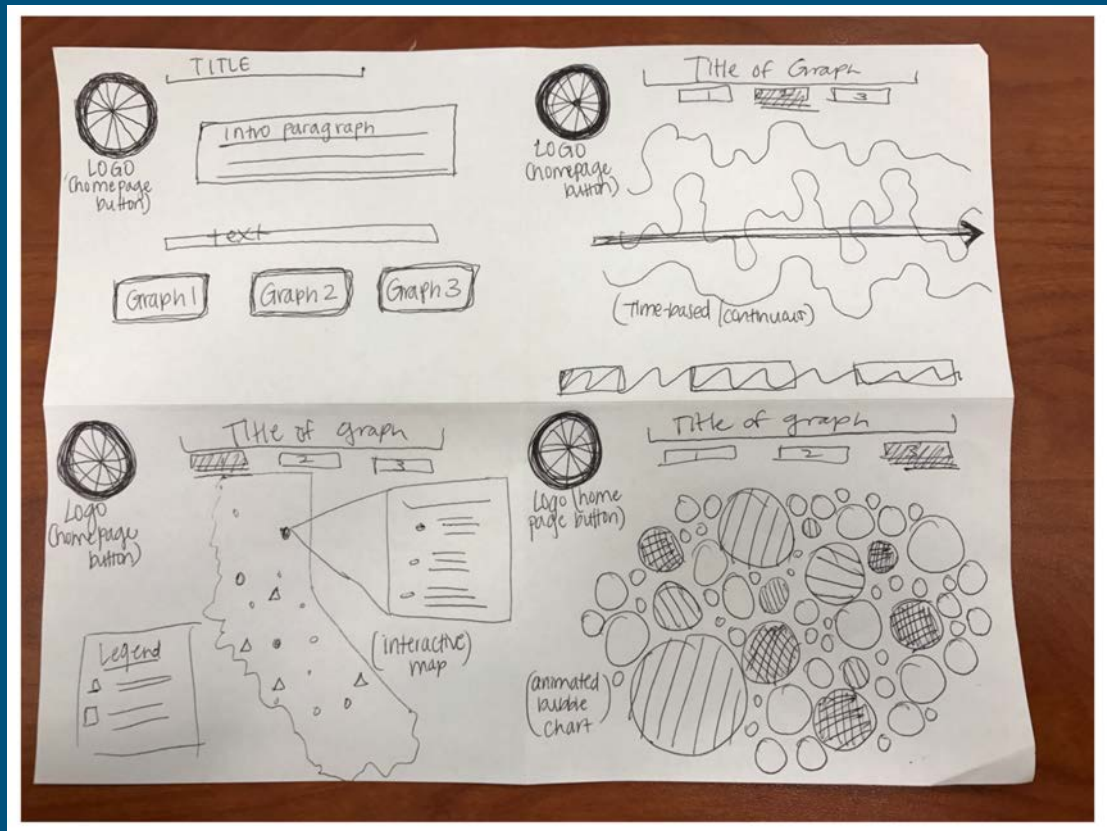
The collage features 11 distinct data visualizations:

- Top Left:** A bubble chart where circles of varying sizes and colors (red, orange, yellow, green, blue, grey) represent data points. A legend box in the top right corner provides a key for the colors and sizes.
- Top Center:** A treemap visualization showing a hierarchical structure of data, with segments of different colors (green, orange, blue, grey) arranged in a semi-circular fan shape.
- Top Right:** A network graph with numerous nodes (colored dots) and edges (grey lines) connecting them, forming a complex web.
- Middle Left:** A donut chart divided into five colored segments. A legend to its left lists categories with percentages: 'spring 0.1%', 'spring 0.1%', 'fall 0.1%', 'spring 0.1%', and 'winter 11.2%'. A label 'winter 10.8%' points to the largest orange segment.
- Middle Center:** A scatter plot with 'Life expectancy (years)' on the y-axis (ranging from 40 to 80) and 'GDP per capita (2000 dollars)' on the x-axis (logarithmic scale from 10<sup>0</sup> to 10<sup>5</sup>). Data points are represented by circles of varying sizes and colors (green, red, orange, blue). The year '2007' is displayed in large blue text.
- Middle Right:** A large, dense scatter plot with many small, multi-colored dots (green, orange, blue, grey) distributed across the frame.
- Bottom Left:** A treemap visualization showing a hierarchical structure of data, with segments of different colors (blue, green, red, orange, yellow, grey) arranged in a semi-circular fan shape.
- Bottom Center:** A network graph with numerous nodes (colored dots) and edges (grey lines) connecting them, forming a complex web.
- Bottom Right:** A treemap visualization showing a hierarchical structure of data, with segments of different colors (blue, green, red, orange, yellow, grey) arranged in a semi-circular fan shape.

# Story board

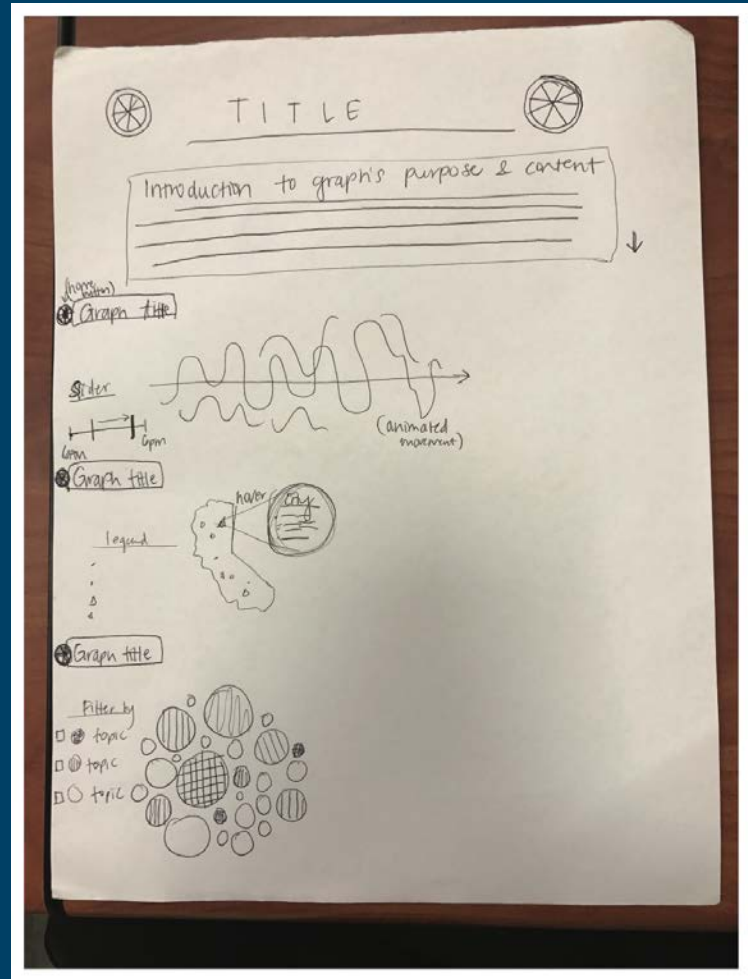
Ideas with D3

Data visualization



# Story board 2

Vertical scroll



# challenges

Idea

Purpose

UI

D3

Finding idea early

Changing idea

# successes

Layout

Story boards

Integrating map with MapBox



# Story board 3

Features:

Carbon footprint calculator

Instagram feed/campaign

Interactive Map

