

GeoVis: an interactive map to visualize common climate indicators

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Geovis is a map rendering of the United States that aims to provide climate enthusiasts or curious individuals with an interactive webpage to visualize common climate indicators such as wind speed, precipitation, and temperature. With the increase in greenhouse gas emissions around the world, it is crucial to visualize such trends that leverages ones understand in climate change. To compile this project, we utilized datasets from Kaggle, gathering our weather data from here while incorporating it other types of datasets. Our visualization garnered much important feedback, with many feedback being appreciative of our minimalistic and intuitive design. We found that many testers were curious at our web application because they were found to be clicking on multiple things for the sake of visualizing the data.

1. INTRODUCTION AND BACKGROUND

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A. Sample Figure

Figure 1 shows an example figure.

Fig. 1. Dark-field image of a point absorber.

B. Sample Table

Table 1 shows an example table.

Table 1. Shape Functions for Quadratic Line Elements

local node	$\{N\}_m$	$\{\Phi_i\}_m$ ($i = x, y, z$)
$m = 1$	$L_1(2L_1 - 1)$	Φ_{i1}
$m = 2$	$L_2(2L_2 - 1)$	Φ_{i2}
$m = 3$	$L_3 = 4L_1L_2$	Φ_{i3}

4. SAMPLE EQUATION

Let X_1, X_2, \dots, X_n be a sequence of independent and identically distributed random variables with $E[X_i] = \mu$ and $\text{Var}[X_i] = \sigma^2 < \infty$, and let

$$S_n = \frac{X_1 + X_2 + \dots + X_n}{n} = \frac{1}{n} \sum_{i=1}^n X_i \quad (1)$$

denote their mean. Then as n approaches infinity, the random variables $\sqrt{n}(S_n - \mu)$ converge in distribution to a normal $\mathcal{N}(0, \sigma^2)$.

5. SAMPLE ALGORITHM

Algorithms can be included using the commands as shown in algorithm 1.

Algorithm 1. Euclid's algorithm

```

1: procedure EUCLID( $a, b$ )           ▷ The g.c.d. of  $a$  and  $b$ 
2:    $r \leftarrow a \bmod b$ 
3:   while  $r \neq 0$  do             ▷ We have the answer if  $r$  is 0
4:      $a \leftarrow b$ 
5:      $b \leftarrow r$ 
6:      $r \leftarrow a \bmod b$ 
7:   return  $b$                      ▷ The gcd is  $b$ 

```

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Fig. 2. Terahertz focusing metalens.

B. Sample Dataset Citation

1. M. Partridge, "Spectra evolution during coating," figshare (2014), <http://dx.doi.org/10.6084/m9.figshare.1004612>.

C. Sample Code Citation

2. C. Rivers, "Epipy: Python tools for epidemiology," Figshare (2014) [retrieved 13 May 2015], <http://dx.doi.org/10.6084/m9.figshare.1005064>.

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