Vis Pitch

Visualization Gene Regulation
Background

- People are trying to understand gene regulation

- DNA has genes
  - Disease risks
  - Eye colours

- Genes are regulated via:
  - Promoters
    - Methylation = Inhibition
  - Enhancers
    - Acetylation = Activation
  - Accessibility of Genes

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Photo: https://www.kaggle.com/c/gene-expression-prediction-cs1850-final
Gosling

A Grammar-based Toolkit for Scalable and Interactive Genomics Data Visualization

Gosling.js: JavaScript library for Gosling
Gos: Python package for Gosling

Using Gosling in your React App
Using Gosling in your Streamlit App
Main idea: Visualize regions of gene activity
  - Humans/Mice/Whatever

Data to Visualize
  - Along the DNA...
    - DNA Methylation
    - Enhancer Acetylation
    - DNA Accessibility

Not worried about finding these datasets