HUMAN GENETIC VARIATION VIEWER

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C G C A T C G A G C T

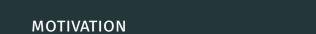
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OUTLINE

- · Motivation
- · Solution
- · BioJS and re-usability
- · Demo and Use-Cases
- · Improvements

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VISUALIZATIONS ARE POWERFUL!

The power of the unaided mind is highly overrated. The real powers come from devising external aids that enhance cognitive abilities. – Donald Norman

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- · NGS had given rise to catalog of genetic variants: dbSNP, COSMIC...
- · More relevant information(prediction): Benign, Damaging, Intermediate
- · Lots of mutations \implies Loads of differing predictions

SOLUTION

An exploratory visualization is the first step towards discovering patterns.

 A graphical hub to present annotated variants from different sources

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- · A graphical hub to present annotated variants from different sources
- · Present information at different levels, since it is too much
- · Scalable and Coherent





IMPLEMENTATION

 \cdot Entirely written in javascript using the $\emph{d3js}$ library

IMPLEMENTATION

- · Entirely written in javascript using the d3js library
- · Deployed as a BioJS component

FEATURES

- · Supports JSON formatted files
- · User defined scoring criteria



SUMMARY

