



PeakLearner

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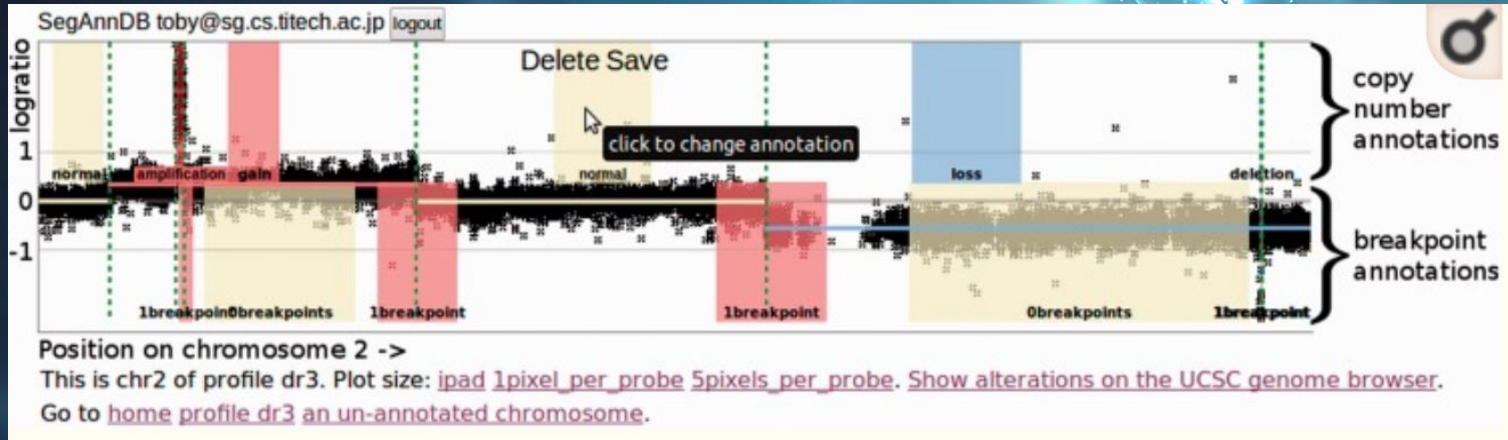
Sponser: Dr Toby Hocking

THE PROBLEM

- Genetic disorders/diseases
- Who cares
- Dr Hocking

- Assistant Professor at NAU
- Postdoctoral work at Tokyo Institute of Tech. And McGill Uni
- Researches how machine learning can process genomic [data](#)





- SegAnnDB: a point-and-click UI for annotating genomic data

PROBLEMS



RESPONSIVENESS

PROBLEMS



RESPONSIVENESS

SCALABILITY

PROBLEMS



RESPONSIVENESS

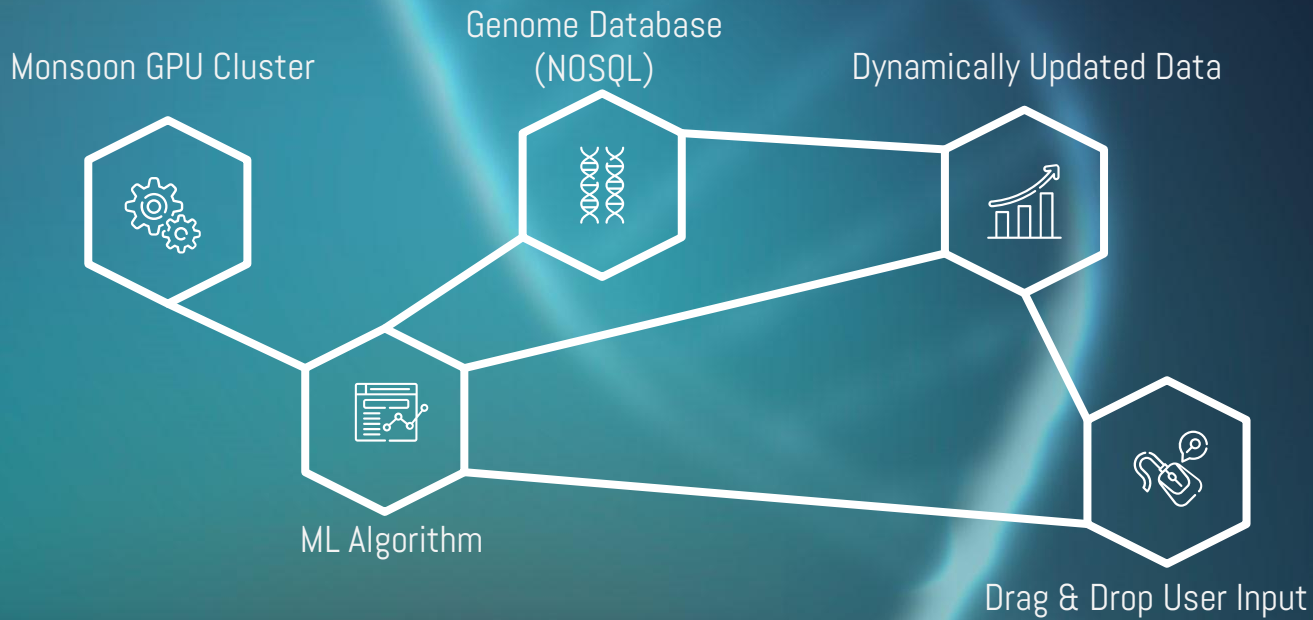


SCALABILITY



CORRECTNESS

Solution



Client Meetings



Weekly meetings focusing on each individual piece of solution chart

Goal: Subdivide each piece into clear manageable tasks

GPU Cluster (SLURM)



Set up small cluster to mimic Monsoon on small scale

Goal: Mini-Monsoon

UI Design



Make UI easy to use for scientists and look “clean” and “professional”

Goal: Make site look like other Genome Browser

Display Data Dynamically



Allow user to move and zoom over data. Bigwig Files => Data

Goal: “Snappy”, movable, editable data model

