

Math 320 – Computer Methods in the Mathematical Sciences I.

Project Title: Investigating Copy Number Variation in Very-Early-Onset Inflammatory Bowel Disease Using CNV Workshop

Authors: Edward Zhao

1 Presentation

Comments:

- Nice anatomical images for illustration.
- Good job explaining the connection between copy number and intensity via genotype.
- Binary segmentation algorithm was a bit confusing to follow.
- The permutations bit was also a bit unclear, but you did a good job explaining it when asked.

Grade: 9/10

Really interesting presentation on a fascinating topic. Clearer exposition of the underlying math would have made it perfect.

2 Paper

Comments:

- Very nice job explaining the scientific background.
- The statistical tools you explore in pages 5-7 are very sophisticated; it would have benefited from some explicit tiny examples.
- Great job explaining the linear binary segmentation, then following up to the circular binary segmentation. Made it much easier to understand.
- Nice idea to compare with another software package (PennCNV) that studies the same problems with different strategies.

Grade: 9.5/10

A very sophisticated look at an interesting tool. Some more attention to structure and exposition would have made the paper even better.