

# EPSRC Vacation Scheme: Week 2 Review

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# Goals of last week

- 1 Implement searching aspect of the Roux Algorithm

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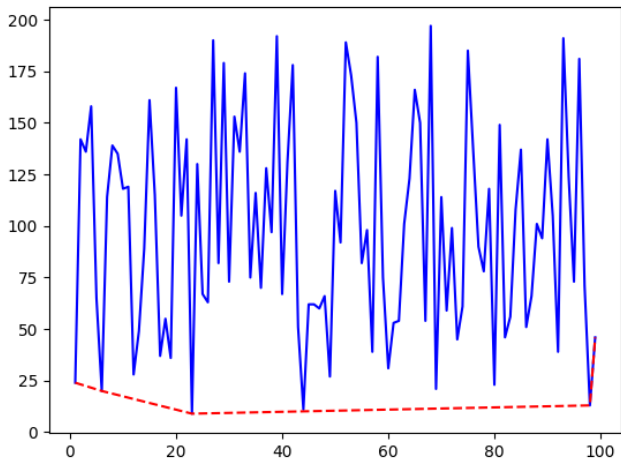
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- Let Python randomly generate functions to test on.

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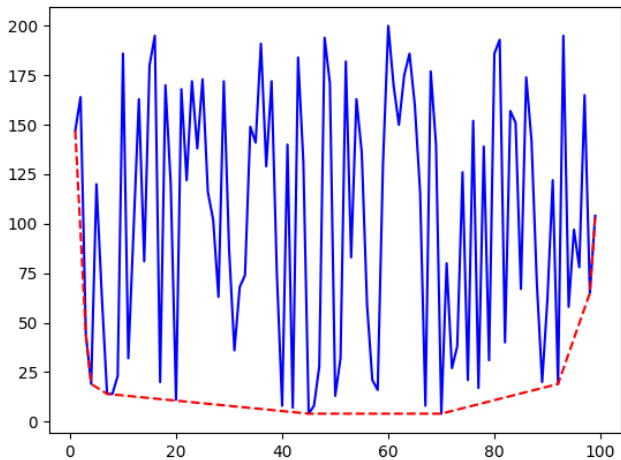
- Relatively easy to fix, and gave massive improvement on performance
- Let Python randomly generate functions to test on.
- This time, they are perfect



# First test



## Second test



# Comparison with Monotone-Chain

- Next task was to compare this with Monotone Chain

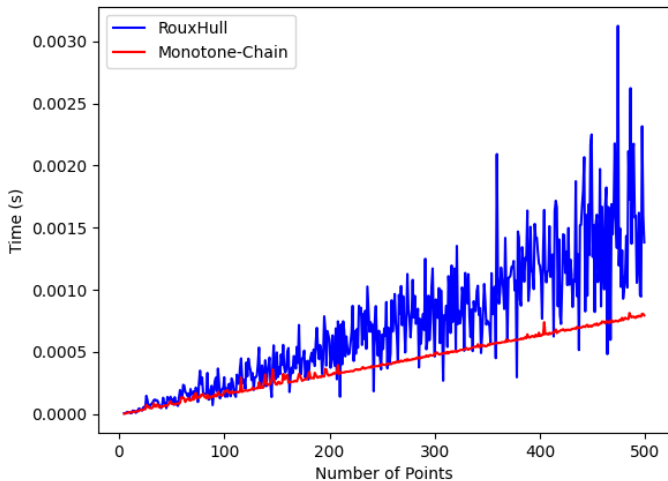
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- A lot more variation in times, not sure why this is

# Roux VS Monotone-Chain



# Quickhull

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# Quickhull

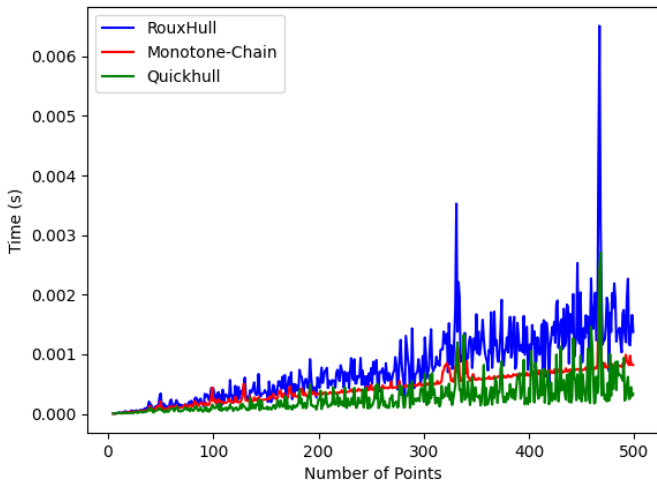
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# Quickhull

- This is possibly the most frustrating piece of code I have ever written
- Upside: Very quick, it runs quicker than both other algorithms
- Note: My implementation isn't perfect, a few edge cases don't work properly

# Complete Comparison



- Began going through Chapter 4.1

# Xu's Thesis

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# Xu's Thesis

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- This week I would like to try implementing some of this?

# Any Questions?