Finding the Optimal Training Zone

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Quantifying an athlete
Different Things Athletes Measure

- Cardio
- Genetics
- Body metrics
- Subjective
- Resistance

Quantify  Personalise
Progressive Overload

- Stress (ex: Exercise)
- Work Capacity (Performed)
- Recovery
- Positive Training Adaptations

Optimum Training

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A baseline might look something like this.
...and of course we can personalise it a little
So that’s the science, but this is about me!
My training zones in triathlon season
Fitness goes up, but what happened in April?

- Started training
- Triathlon
Back pain down, fitness up!
Subjective measures work pretty well too
My fitness vs my fatness
My resting pulse is dropping over time (2016-2018)
High output for low volume
What did I learn?

• I’m definitely getting fitter. It is efficient, and calibration is helping.

• Ratios work for amateurs too. As long as you train regularly.

• Age is a thing, and is measurable too. Injuries and annoying stuff happens more. Getting the ratios right helps even more with age.

• With only a few things measured there are almost too many things to correlate.

• You can create baseline ratios for anything that can be used to calculate ‘training load’. e.g. subjective, heart rate, distance, speed etc.
What now, what next?

• We implemented a super fast parallel algorithm to calculate ratios, training loads etc. It can calculate a lifetime of data in about 2 milliseconds.

• This allows us to measure thousands of things in parallel and potentially correlate or average them.

• We partnered with a sequencing company and built a new genetic test with 5000 variants that are important for fitness. This has improved the predictiveness of our models.

• We have to get better at automatically correlating stuff and be alerted to changes.
Get in touch

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Office hour for Genetrainer App 13:00 Sunday
How to workshop (for more techniques) 14:00 Sunday