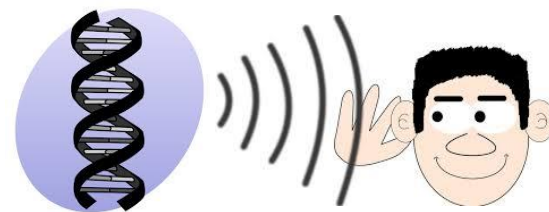# Summer internship opportunity

- Something unique for the CV!

- *"Crowd-sourcing the aural identities of places by evolutionary optimisation":* genetic algorithms (GA) are an AI technique to find solutions to difficult problems. A web-hosted GA with real people guiding the search will evolve a collection of sounds representing the shared memories of a particular place

- Internship: Implement web application (Java / PHP) backend to manage a pool of sounds and user feedback results, front end web forms, and a possible Android app in Java

- 12 weeks, £200/wk grant for living costs

- Need/learn skills in Java, web technologies, app development

- A similar project (not mine!) writing music by crowds https://crowdsound.net/ gives a flavour of what's intended

Scottish Crucible

More info… Sandy Brownlee
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Basic idea for the platform…

Set of samples

S1   S2
S3   S4   S5
S6   S7

Samples assembled at random into combinations

S1	S5	S3
S2	S3	S6
S4	S1	S7
S7	S1	S3
S2	S4	S5

Users hear 2-3 of the combinations, and assign ranks to them [highest rank means "most like the place"] These ranks are added together across all users, and the top ranked ones are chosen

The new population replaces the old one and this repeats for many iterations (finishing when we reach an arbitrary number of repeats)

S7	S3	S7
S2	S1	S3
S4	S1	S6
S2	S3	S6
S7	S1	S3
S4	S1	S7

We mix these up to make a "population" of new combinations

S2	S3	S6
S7	S1	S3
S4	S1	S7