## Artificial Intelligence (CO3519): Tutorial – Calendar Week 43

## **Optimization**

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## 1.3.1. Objective spaces

"Our values reflect who we are as a university and what we stand for.1" They are *Achieving Together*, *Being Proud*, *Creating Opportunity*, and *Supporting All*, <sup>1</sup> *cf.* Fig. 1.

- a) Formulate one SMART objective for each of the four values. In particular, each must be measurable; explain how they would be measured.
- b) Express each SMART objective as a KPI jointly with a target for that KPI.

See https://www.uclan.ac.uk/about-us/strategic-plan-2021-2028.



**Figure 1.** Our values "define the things that are most important to us and nurture a sense of shared purpose. They reflect our ambitious nature, inspire us to constantly improve and to enrich the lives of our students, our colleagues and the communities we serve.<sup>1</sup>"

The Strategic Plan<sup>1</sup> does mention a series of KPIs. Since this is an exercise and not an actual policy discussion, you are not restricted to the KPIs from the Strategic Plan.<sup>2</sup>

## 1.3.2. Parameter spaces

Conceive of a scenario where institutional objectives, expressed by KPIs, may give rise to a conflict, in that the optimum for one is not identical with the optimum for another.<sup>3</sup> How can the field of potential choices to be made be represented as a parameter space? Formulate parameters and outline how a relevant actor has direct control over them.

Submission deadline: 13th November 2021; discussion planned for 26th November 2021. Group work by up to four people is welcome.

<sup>&</sup>lt;sup>2</sup>Note that the KPIs mentioned in the Strategic Plan are mapped to six priorities as opposed to the four values; also, no concrete targets are given, *i.e.*, they would need to be amended by specific targets.

<sup>&</sup>lt;sup>3</sup>If this cannot happen for the KPIs selected above, *e.g.*, because they all address mutually unrelated issues, compile a different list of criteria for this purpose.