

基於文字處理針對成大論文的 SDG 關鍵字推薦

Use word processing to recommend SDG keywords for NCKU papers

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一、簡介：

SDGs(Sustainable Development Goals):是聯合國所制定一系列的發展目標，具體有 17 個目標以及其隨附的 169 項指標。而我們成大在 2020 年的 impact rankings 為台灣第一。

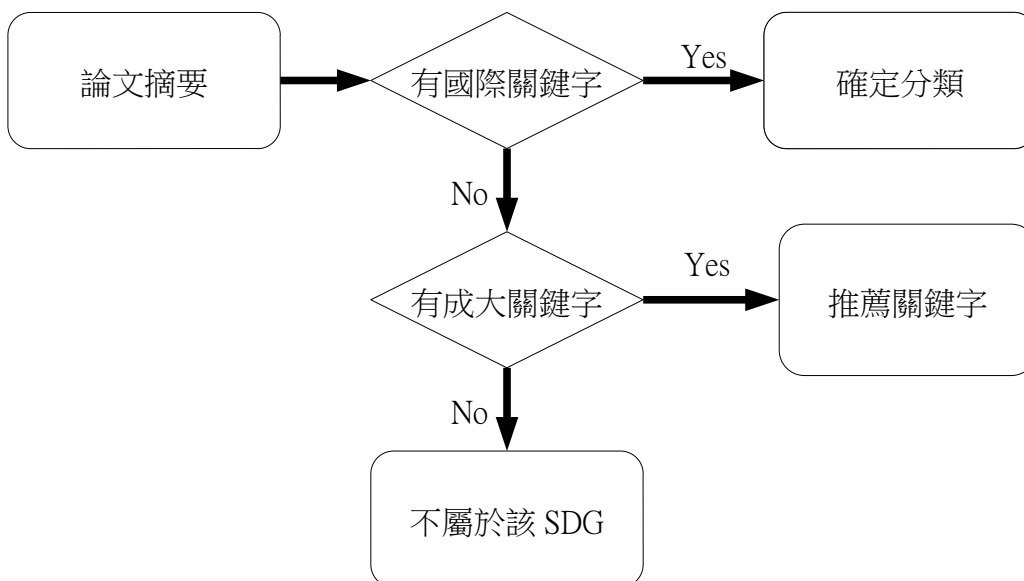
雖然成大在 2020 的排名上有著優異的表現，但我相信我們仍有進步的空間。

於是我決定從論文下手(impact rankings 的評分有 20%左右是根據論文)。我認為成大有一些論文沒能被算入 SDG 的範疇。

這可能是因為我們在字詞的使用沒有符合分類的標準，而導致沒有被分類到正確的 SDG 當中，甚至不被計算。

因此我想透過這個專題來提供一個針對成大論文的推薦系統，對於相對應的 SDG 做出分類以及推薦。

以下為專題運作流程:



二、測試結果：

該篇論文為 SDG4 有被成功分類出來

Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)
 Volume 11937 LNCS, 2019, Pages 207-215
 2nd International Conference on Innovative Technologies and Learning, ICITL 2019; Tromsø; Norway; 2 December 2019 到 5 December 2019; 代碼 234499

Improving Programming Education Quality with Automatic Grading System (Conference Paper)

SDG	chance	matched	suggest
SDG 4 - Quality Education	2	environmental education	
SDG 6 - Clean Water and Sanitation	1	communities; communities	wastewater, treatment, freshwater; water purification, freshwater
SDG 7 - Affordable and Clean Energy	1	sectors	energy transition
SDG 11 - Sustainable Cities and Communities	1	program; education; students; building; school; campus	city, circular economy; city, circular economy; city, circular economy; human settlement, disaster; urban, pollutant; urban, pollutant
SDG 15 - Life On Land	1	value	land, ecosystem
SDG 3- Good Health and Well-being	0.5	process; research	child abuse; child abuse
SDG 8 - Decent Work and Economic Growth	0.5	intention	medium enterprise
SDG 9 - Industry, Innovation and Infrastructure	0.5	intention; value	medium enterprise; product innovation
SDG 10 - Reducing Inequality	0.5	energy	migration polic
SDG 13 - Climate Action	0.5	energy; building	climate, energy conservation; climate, energy conservation
SDG 14 - Life Below Water	0.5	development; development	marine, fishery; ocean, fisheries
SDG 16 - Peace, Justice, and Strong Institutions	0.5	process; research	child abuse; child abuse
SDG 1 - No Poverty			

該篇論文為 SDG11，有成功被分類且進行推薦

Cities
 Volume 84, January 2019, Pages 56-65

Does bus accessibility affect property prices? (Article)

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SDG	chance	matched	suggest
SDG 5 - Gender Equality	1	effects	female employment
SDG 8 - Decent Work and Economic Growth	1	travel	sustainable tourism
SDG 11 - Sustainable Cities and Communities	1	bus; transit; bus; transit; bus; transit; property	cities, congestion; cities, congestion; cities, transportation; cities, transportation; cities, public transport; cities, public transport; human settlement, disaster
SDG 12 - Responsible Consumption and Production	1	travel	sustainable tourism
SDG 13 - Climate Action	1	property; travel	climate, awareness; climate, decision-making
SDG 3- Good Health and Well-being	0.5	research	child abuse
SDG 9 - Industry, Innovation and Infrastructure	0.5	benefits	product innovation
SDG 16 - Peace, Justice, and Strong Institutions	0.5	research	child abuse
SDG 1 - No Poverty			