Documento Complementar do artigo

“Robótica Educacional Aplicada ao Desenvolvimento do Pensamento Computacional: Um Mapeamento Sistemático da Literatura”

A tabela a seguir sumariza a quantidade de estudos retornados na busca inicial em cada Biblioteca Virtual

Biblioteca Virtual	Nº de Artigos Retornados
ACM	1.653
SCIENCEDIRECT	1.525
SPRINGER	374
SCOPUS	271
IEEE	225
TOTAL	4.048

A tabela a seguir apresenta os estudos primários utilizados no mapeamento:

ID	Biblioteca Virtual	Ano	Autores	Título
E01	ACM	2010	Mikko Apiola, Matti Lattu, e Tomi A. Pasanen	Creativity and Intrinsic Motivation in Computer Science Education: Experimenting with Robots
E02	SCIENCEDIRECT	2012	Uvais Qidwai, Ryan Riley e Sayed El-Sayed	Attracting Students to the Computing Disciplines: A Case Study of a Robotics Contest
E03	SCIENCEDIRECT	2014	Marina Umaschi Bers, Louise Flannery, Elizabeth R. Kazakoff e Amanda Sullivan	Computational thinking and tinkering: Exploration of an early childhood robotics curriculum
E04	SCOPUS	2015	Jacqui Chetty	Lego© mindstorms: Merely a toy or a powerful pedagogical tool for learning computer programming?
E05	SCOPUS	2016	Soumela Atmatzidou e Stavros Demetriadis	Advancing students' computational thinking skills through educational robotics: A study on age and gender relevant differences
E06	SPRINGER	2016	Jacqueline Leonard, Alan Buss, Ruben Gamboa, Monica Mitchell, Olatokunbo	Using Robotics and Game Design to Enhance Children’s Self-Efficacy, STEM Attitudes, and Computational Thinking Skills

			S. Fashola, Tarcia Hubert e Sultan Almughyirah	
E07	SCIENCEDIRECT	2016	Soumela Atmatzidou e Stavros Demetriadis	Advancing students' computational thinking skills through educational robotics: A study on age and gender relevant differences
E08	SCOPUS	2017	Yen Air Caballero González e Ana García-Valcárcel Muñoz-Repiso	Development of computational thinking skills and collaborative learning in initial education students through educational activities supported by ICT resources and programmable educational robots
E09	SCOPUS	2017	Lito Athanasiou, Paraskevi Topali e A. Mikropoulos	The use of robotics in introductory programming for elementary students
E10	SCOPUS	2017	Soumela Atmatzidou e Stavros Demetriadis	A didactical model for educational robotics activities: A study on improving skills through strong or minimal guidance
E11	SCOPUS	2017	Ernest B. B. Gyebi, Marc Hanheide e Grzegorz Cielniak	The effectiveness of integrating educational robotic activities into higher education computer science curricula: A case study in a developing country
E12	ACM	2017	Alexandros Merkouris, Konstantinos Chorianopoulos e Achilles Kameas	Teaching Programming in Secondary Education Through Embodied Computing Platforms: Robotics and Wearables
E13	SCOPUS	2018	Alexandres Merkouris e Konstantinos Chorianopoulos	Programming touch and full-body interaction with a remotely controlled robot in a secondary education STEM course
E14	SCOPUS	2018	Yen Air Caballero González e Ana García-Valcárcel Muñoz-Repiso	A robotics-based approach to foster programming skills and computational thinking: Pilot experience in the classroom of early childhood education
E15	SCOPUS	2018	Wagner Titon e Alejandro Rafael Garcia Ramirez	Teaching programming concepts using educational robotics supported by the arduino platform: An application in the industrial computer learning course
E16	SCOPUS	2018	Dayang N. A. Jawawi, Noraini Ibrahim, Shahliza Abdul Halim, Rosbi Mamar, Norhidawani Mohamed e Rooster Tumeng	Adaptation of Project-Oriented Problem-Based Framework for Teaching Computer Programming
E17	SCOPUS	2018	S. Chookaew, S. Howimanporn, P. Pratumsuwan, S. Hutamarn, W. Sootkaneung e C. Wongwatkit	Enhancing High-School Students' Computational Thinking with Educational Robotics Learning
E18	SCOPUS	2018	Wei-Yeh Huang, Chiu-Fan Hu e Cheng-Chih Wu	The Use of Different Kinds of Robots to Spark Student Interest in Learning Computational Thinking

E19	SCOPUS	2018	Yen Air Caballero González e Ana García-Valcárcel Muñoz-Repiso	Educational robotics for the formation of programming skills and computational thinking in childish
E20	SCOPUS	2018	Vaso Constantinou e Andri Ioannou	Development of computational thinking skills through educational robotics
E21	IEEE	2018	Blanca Miller, Adam Kirn, Mercedes Anderson, Justin C. Major, David Feil-Seifer e Melissa Jurkiewicz	Unplugged Robotics to Increase K-12 Students' Engineering Interest and Attitudes
E22	ACM	2018	Giuseppe Chiazzese, Marco Arrigo, Antonella Chifari, Violetta Lonati, e Crispino Tosto	Exploring the Effect of a Robotics Laboratory on Computational Thinking Skills in Primary School Children Using the Bebras Tasks
E23	SCOPUS	2019	Evgenia Roussou e Maria Rangoussi	On the use of robotics for the development of computational thinking in kindergarten: Educational intervention and evaluation
E24	SCOPUS	2019	Maria Blancas, Cristina Valero, Anna Mura, Vasiliki Vouloutsi e Paul F. M. J. Verschure	"CREA": An inquiry-based methodology to teach robotics to children
E25	SCOPUS	2019	Marina U.Bers, Carina González-González e BelénArmas–Torres	Coding as a playground: Promoting positive learning experiences in childhood classrooms
E26	SCOPUS	2019	Masahiro Osogami, Kazutomi Sugihara e Kazumasa Ohkuma	The effects for programming learning using actual robots control with scratch
E27	SCOPUS	2019	Alexandros Merkouris e Konstantinos Chorianopoulos	Programming embodied interactions with a remotely controlled educational robot
E28	SPRINGER	2019	José-Manuel Sáez-López, Maria-Luisa Sevillano-García e Esteban Vazquez-Cano	The effect of programming on primary school students' mathematical and scientific understanding: educational use of mBot
E29	SPRINGER	2019	P. Kevin Keith, Florence R. Sullivan e Duy Pham	Roles, Collaboration, and the Development of Computational Thinking in a Robotics Learning Environment
E30	IEEE	2019	Bayram Koyuncu, Majlinda Fetaji, Bekim Fetaji e Anis Sefidanovski	Analyzing the Impact of New Instruction Method Using Hardware Control Such As Robotics in Learning Programming
E31	IEEE	2019	Joao Tiago Aparicio, Sergio Pereira, Manuela Aparicio e Carlos J. Costa	Learning Programming Using Educational Robotics
E32	SCIENCEDIRECT	2019	Charoula Angelia e Nicos Valanides	Developing young children's computational thinking with educational robotics: An interaction effect between gender and scaffolding strategy