Dr. Christian Barrientos

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Education

- Universitat Politecnica de Catalunya — Barcelona, Espana
  Ph. D. Applied Mathematics — 2004
- University of Puerto Rico — San Juan, Puerto Rico
  Master of Sciences - Mathematics — 1997
- Universidad Catolica de Valparaso — Valparaso, Chile
  Bachelor - Mathematics — 1990

Academic Experience

University of South Florida — Tampa, Florida, USA
Assistant Professor of Instruction — August 2023 - Present

Valencia College — Orlando, Florida, USA
August 2018 - July 2023

Clayton State University, Department of Mathematics — Morrow, Georgia, USA
August 2006 - May 2017

University of Central Florida, Department of Mathematics — Orlando, Florida, USA
August 2003 - May 2006

Publications

Published Articles

On the number of caterpillars,

The graceful coalescence of alpha cycles, Communications in Advanced Mathematical Sciences, 2(2) (2019), 114{120. (with S. Minion).

New -trees and graceful unions of -graphs and linear forests, J. Combin. Math. Combin. Comput., 108 (2019), 205{220 (with S. Minion).

Series-parallel operations with -graphs, Theory and Applications of Graphs, 6(1) (2019), Article 4. (with S. Minion).

Special graceful labelings of irregular fences and lobsters, Universal Journal of Mathematics and Applications, 2(1) (2019), 1{10.

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The number of snakes in a box, Fundamental Journal of Mathematics and Applications, 1(2) (2018), 145{156 (with S. Minion).

On the number of -labeled graphs, Discuss. Math. Graph Theory, 38 (2018), 177{188 (with S. Minion).

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Constructing graceful graphs with caterpillars, J. Algorithms Comput., 48(1) (2016), 117{125. (with S. Minion).

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Enumerating families of labeled graphs, Journal of Integer Sequences, 18 (2015), Article 15.1.7 (with S. Minion).

The mean labeling of some crowns, J. Algorithms Comput., 45 (2014), 43{54. (with M.E. Abdel-Aal, S. Minion, and D. Williams).

Three graceful operations, J. Algorithms Comput., 45 (2014), 13{24. (with S. Minion).

On graceful supersubdivisions of graphs, Bul. Inst. Combin. Appl., 70 (2014), 77{85. (with S. Barrientos).

Mean graphs, AKCE J. Graphs Comb., 11 (2014), No. 1, 13{26. (with E. Krop).

Operations with mean graphs, Congr. Numer., 217 (2013), 5{19. (with S. Bailey).

Some theorems on the q-analogue of the generalized Stirling numbers and the combinatorics of the 0-1 tableaux. Bull. Malays. Math. Sci. Soc. (2) 34(3) (2011), 1{15.(withR. Corcino).

Graceful and edge-antimagic labelings. Ars Combin., 96 (2010), 505{513. (with M. Baca).

On graceful chain graphs. Util. Math., 78 (2009), 55{64.

Odd-graceful labelings of trees of diameter 5. AKCE J. Graphs Comb., 6 (2009), 307{313.

Irregular colorings of some graph classes. Bul. Inst. Combin. Appl., 55 (2009), 105{119. (with M. Anderson, R.C. Brigham, J.R. Carrington, R.P. Vitray, and J. Yellen.)

On super edge-antimagic total labelings of mK_n. Discrete Math., 308 (2008), 5032{5037. (with M. Baca).

Invariants of Fibonacci graphs. J. Combin. Math. Combin. Comput., 68 (2008), 273{ 285. (with M. Anderson, R.C. Brigham, J.R. Carrington, R.P. Vitray, and J. Yellen).

Maximum demand graphs for eternal security. J. Combin. Math. Combin. Comput., 61 (2007), 111{127. (with M. Anderson, R.C. Brigham, J.R. Carrington, R.P. Vitray, and J. Yellen.)

Graceful arbitrary super-subdivisions of graphs. Indian J. Pure Appl. Math. , 38 (2007), 445{450.

Graceful graphs with pendant edges. Australas. J. Combin., 33 (2005), 99{107.

The gracefulness of unions of cycles and complete bipartite graphs. J. Combin. Math. Combin. Comput., 52(2005), 69{78.

Graceful labeling of chain and corona graphs. Bul. Inst. Combin. Appl. , 34 (2002), 17{26.

Equitable labelings of corona graphs. J. Combin. Math. Combin. Comput., 41 (2002), 139{149.

Graceful labelings of cyclic snakes. Ars Combin., 60 (2001), 85{96.

New families of equitable graphs. Util. Math. , 60 (2001), 123-1-37.

On 2-equitable labelings of graphs. Notas Soc. Mat. Chile (N.S.), 15 (1996) No. 1, 97{110. (with H. Hevia).

Equitable labelings of forest. Combinatorics and Graph Theory `95 (ed. Y. Alavi). World Scienti c, Singapore 1 (1995), 1{26. (with I.J. Dejter and H. Hevia).

Randomly star-decomposable graphs. Congr. Numer., 64 (1988), 193{195. (with A. Bernasconi, E. Jeltch, C. Troncoso, and S. Ruiz).

Other Publications

Sequence A079273: Wiener index of the caterpillar of diameter 3 where each internal vertex has attached $n - 2$ pendent vertices. The On-Line Encyclopedia of Integer Sequences. March 31 2023.

Sequence A115514: Number of 2-element subsets of $f1; 2; :::; n + 2g$ such that the absolute di erence of the elements is $k + 1$, where $1 \leq k \leq n$. The On-Line Encyclopedia of Integer Sequences. June 27 2022.

Sequence A008805: Number of connected bipartite graphs with $n + 1$ edges and a stable set of cardinality 2. The On-Line Encyclopedia of Integer Sequences. June 15 2022.

Sequence A000096: Number of bipartite graphs with $2n$ or $2n + 1$ edges, no isolated vertices, and a stable set of cardinality 2. The On-Line Encyclopedia of Integer Sequences. June 13 2022.

Sequence A008611: Number of multiples of 3 between n and 2n. The On-Line Encyclopedia of Integer Sequences. December 20 2021.

Sequence A001900: Number of 0-1 square matrices of order $n + 1$ with exactly $2n + 1$ nonzero entries where the cell $(i; j)$ is 1 for all $i + j = n + 2$ and every descending diagonal has exactly one 1. The On-Line Encyclopedia of Integer Sequences. July 17 2021.

Sequence A061925: Number of square polyominoes with at least $2n - 2$ cells whose bounding box has order $2 \times n$. The On-Line Encyclopedia of Integer Sequences. January 1 2021.

Sequence A102526: Number of homeomorphically irreducible caterpillars with $n + 3$ edges. The On-Line Encyclopedia of Integer Sequences. September 12 2020.

Sequence A102541: Number of irreducible caterpillars with $n + 3$ edges and diameter $k + 2$. The On-Line Encyclopedia of Integer Sequences. April 5 2020.

Sequence A329910: Number of harmoniously labeled graphs with n edges and at most n vertices. The On-Line Encyclopedia of Integer Sequences. November 23 2019.

Sequence A308203: Number of non-isomorphic kC_n-snakes for $n \geq 3$ and $k \geq 2$. The On-Line Encyclopedia of Integer Sequences. May 15 2019.

Sequence A071232: Number of non-isomorphic $8C_m$-snakes. The On-Line Encyclopedia of Integer Sequences. May 16 2019.

Sequence A057979: Number of non-isomorphic outerplanar graphs of order $n \geq 3$, maximum degree 3, and largest possible size. The On-Line Encyclopedia of Integer Sequences (with S. Minion). February 27 2018.

Sequence A003453: Number of non-isomorphic outerplanar graphs of order $n \geq 3$ and size $n + 2$. The On-Line Encyclopedia of Integer Sequences (with S. Minion). February 27 2018.

Sequence A194005: Number of symmetric binary strings of odd length n with Hamming weight $k > 0$ and no consecutive 1's. The On-Line Encyclopedia of Integer Sequences (with S. Minion). February 27 2018.

Sequence A016777: The size of any snake polyomino with n cells. The On-Line Encyclopedia of Integer Sequences (with S. Minion). February 27 2018.

Sequence A255908: Number of -labeled graphs with n edges whose labeling is bipartite with boundary value . The On-Line Encyclopedia of Integer Sequences (with S. Minion). March 10 2015.

Sequence A085527: Number of -labeled graphs with n vertices. The On-Line Encyclopedia of Integer Sequences (with S. Minion). February 20 2015

Sequence A241094: Number of -labeled graphs that do not use the label i, where $1 \leq i \leq n - 1$. The On-Line Encyclopedia of Integer Sequences (with S. Minion). April 15 2014

Sequence A245517: Number of -labeled graphs with n edges and boundary value that do not use one number from $f1; 2; :::; n - 1g$ as a label, $n \geq 4$, $1 \leq \leq n - 2$. The On-Line Encyclopedia of Integer Sequences (with S. Minion). July 24 2014.

Sequence A245518: Number of -labeled graphs with n edges that do not use the label i for $1 \leq i \leq n - 1$ and $n \geq 4$. The On-Line Encyclopedia of Integer Sequences (with S. Minion). July 24 2014.

Sequence A245519: Number of -labeled graphs with n edges and at most n vertices, $n \geq 1$. The On-Line Encyclopedia of Integer Sequences (with S. Minion). July 24 2014.