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.

Snakes and caterpillars in graceful graphs, J. Algorithms Comput., 50(2) (2018), 37{47. (with S. Minion).

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).

On the graceful Cartesian product of -trees, Theory and Applications of Graphs, 4(1) (2017), Article 3. (with S. Minion).

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

A new attack on Kotzig's conjecture, Electron. J. Graph Theory Appl., 4(2) (2016), 119{131. (with S. Minion).

Mean trees, Bul. Inst. Combin. Appl., 75 (2015), 8{18.

Alpha labelings of snake polyominoes and hexagonal chains, Bul. Inst. Combin. Appl., 74 (2015), 73{83. (with S. Minion).

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,

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.