Jordan Bell

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WORK HISTORY

Tutor, Content Creator January 2021 - current
Jordan Bell Mathematics Tutoring Toronto (jordanbell.info)

- Tutoring high school and university mathematics, and occassional sessions for probability, statistics, micro and macro economics, physics, and accounting at secondary and post-secondary level.
- Comprehensive experience with Ontario secondary, IB, and AP curriculum for mathematics, physics, accounting, and economics, and with University of Toronto undergraduate mathematics courses from first year to fourth year, and substantial experience with first and second year probability, statistics and micro and macro economics courses.

Mathematics tutor March 2018 - December 2020
Toronto Elite Tutorial Services

- Tutoring high school mathematics, all grades, occasional postsecondary clients for statistics. Made plans for full school year (private schools) and semester with students and parents for regular tutoring agendas to reliably and noticeably improve marks and sense of mastery.

Course Instructor Apr 2013 - Apr 2017
Department of Mathematics, University of Toronto

- Course instructor for undergraduate mathematics courses at all three campuses of the University of Toronto.
- Experience as sole instructor of a one section course (differential equations): setting syllabus according to university calendar and past courses, delivered lectures, and made assignments, tests and final exam.
- Experience as part of teaching teams for multiple section courses, both when there is a designated senior instructor and when there is a consensus system without a senior instructor.

Teaching Assistant September 2009 - April 2013
Department of Mathematics, University of Toronto

- Experience with all formats of tutorials: working out examples, answering questions, explaining topics, administering quizzes, group assignments.
- Experience evaluating student work (quizzes, tests, midterms, assignments, essays)
- Experience as teaching assistant for majority of University of Toronto undergraduate mathematics courses, up to fourth year

EDUCATION

Graduate Certificate, Analytics for Business Decision Making
George Brown College, Toronto, May 2019

Canada Graduate Scholarships – Doctoral (CGS D), University of Toronto, Department of Mathematics

Master of Science, Mathematics
University of Toronto, Toronto, June 2009
Canada Graduate Scholarships – Master's (CGS M)

Bachelor of Mathematics, Mathematics
Carleton University, Ottawa, June 2007
University Medal in Mathematics

PUBLICATIONS

- Andrews, George E., and Jordan Bell. "Euler's Pentagonal Number Theorem and the Rogers-Fine Identity." *Annals of Combinatorics* 16, no. 3 (2012): 411–20. https://doi.org/10.1007/s00026-012-0139-4
- Bell, Jordan. "A New Method for Constructing Nonlinear Modular *n*-Queens Solutions." *Ars Combinatoria* 78 (2006): 151–55.
- ———. "A Summary of Euler's Work on the Pentagonal Number Theorem." *Archive for History of Exact Sciences* 64, no. 3 (2010): 301–73. https://doi.org/10.1007/s00407-010-0057-y
- ———. "Cyclotomic Orthomorphisms of Finite Fields." *Discrete Applied Mathematics* 161, no. 1–2 (2013): 294–300. https://doi.org/10.1016/j.dam.2012.08.013
- ———. "Estimates for the Norms of Products of Sines and Cosines." *Journal of Mathematical Analysis and Applications* 405, no. 2 (2013): 530–45. https://doi.org/10.1016/j.jmaa.2013.04.010
- ———. "Nonlinear Modular Latin Queen Squares." *Utilitas Mathematica* 74 (2007): 71–75.
- ———. "Polynomial Modular *n*-Queens Solutions." *Acta Arithmetica* 129, no. 4 (2007): 335–39. https://doi.org/10.4064/aa129-4-4>
- Bell, Jordan, and Viktor Blåsjö. "Pietro Mengoli's 1650 Proof that the Harmonic Series Diverges." *Mathematics Magazine* 91, no. 5 (2018): 341–47. https://doi.org/10.1080/0025570X.2018.1506656
- Bell, Jordan, and Brett Stevens. "A Survey of Known Results and Research Areas for *n*-Queens." *Discrete Mathematics* 309, no. 1 (2009): 1–31. https://doi.org/10.1016/j.disc.2007.12.043
- ———. "Constructing Orthogonal Pandiagonal Latin Squares and Panmagic Squares from Modular n-Queens Solutions." *Journal of Combinatorial Designs* 15, no. 3 (2007): 221–34. https://doi.org/10.1002/jcd.20143
- ———. "Results for the *n*-Queens Problem on the Möbius Board." *The Australasian Journal of Combinatorics* 42 (2008): 21–34. https://ajc.maths.uq.edu.au
- Bell, Jordan, and Qiang Wang. "Results on Permutations with Distinct Difference Property." *Contributions to Discrete Mathematics* 4, no. 1 (2009): 107–11. https://cdm.ucalgary.ca/

2019 recipient of Carl B. Allendoerfer Award for expository mathematical writing, Mathematical Association of America (MAA) for Jordan Bell and Viktor Blåsjö, *Pietro Mengoli's 1650 Proof that the Harmonic Series Diverges*, Mathematics Magazine, Vol. 91, no. 5, December 2018, pp. 341-347.

COMPUTER SKILLS

Languages: Python, Excel/Google Sheets, SQL, R, SAS, LaTeX, Markdown, HTML, CSS, JavaScript

Software: Git, Jupyter, Visual Studio Code, ImageMagick, OpenShot, QGIS (accessing and transforming geospatial datasets from Statistics Canada, and making raster and vector visualizations with QGIS)

Knowledge areas: Time series analysis, differential equations, financial accounting, business KPI