

Parsiad Azimzadeh

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Canadian Citizen
Fluent in English, proficient in Farsi

Current position

Postdoctoral Assistant Professor, University of Michigan

Education

2017 PhD, University of Waterloo
2013 MMATH, University of Waterloo
2011 BSc, Simon Fraser University

Selected publications and preprints

- [1] P. Azimzadeh and E. Bayraktar. “High order Bellman equations and weakly chained diagonally dominant tensors”. In: *arXiv preprint arXiv:1803.08870* (2018). URL: <https://arxiv.org/abs/1803.08870>.
- [2] M. Amy, P. Azimzadeh, and M. Mosca. “On the CNOT-complexity of CNOT-phase circuits”. In: *arXiv preprint arXiv:1712.01859* (2017). URL: <https://arxiv.org/abs/1712.01859>.
- [3] P. Azimzadeh, E. Bayraktar, and G. Labahn. “Convergence of implicit schemes for Hamilton-Jacobi-Bellman quasi-variational inequalities”. In: *arXiv preprint arXiv:1705.02922* (2017). URL: <https://arxiv.org/abs/1705.02922>.
- [4] P. Azimzadeh. “A fast and stable test to check if a weakly diagonally dominant matrix is a nonsingular M-matrix”. In: *Math. Comp. (to appear)* (2017). URL: <https://doi.org/10.1090/mcom/3347>.
- [5] P. Azimzadeh. “A zero-sum stochastic differential game with impulses, precommitment, and unrestricted cost functions”. In: *Appl. Math. Optim. (to appear)* (2017). URL: <https://doi.org/10.1007/s00245-017-9445-x>.
- [6] P. Azimzadeh and P. A. Forsyth. “Weakly chained matrices, policy iteration, and impulse control”. In: *SIAM J. Numer. Anal.* 54.3 (2016), pp. 1341–1364. ISSN: 0036-1429. URL: <https://doi.org/10.1137/15M1043431>.
- [7] P. Azimzadeh and T. Carpenter. “Fast Engset computation”. In: *Oper. Res. Lett.* 44.3 (2016), pp. 313–318. ISSN: 0167-6377. URL: <https://doi.org/10.1016/j.orl.2016.02.011>.
- [8] P. Azimzadeh and P. A. Forsyth. “The existence of optimal bang-bang controls for GMxB contracts”. In: *SIAM J. Financial Math.* 6.1 (2015), pp. 117–139. ISSN: 1945-497X. URL: <https://doi.org/10.1137/140953885>.

- [9] P. Azimzadeh, P. A. Forsyth, and K. R. Vetzal. “Hedging costs for variable annuities under regime-switching”. In: *Hidden Markov models in finance*. Vol. 209. Internat. Ser. Oper. Res. Management Sci. Springer, New York, 2014, pp. 133–166. URL: https://doi.org/10.1007/978-1-4899-7442-6_6.

Awards

2015-2017	David R. Cheriton Graduate Scholarship	20,000 CAD
2014	Meloche Monnex Graduate Scholarship	5,000 CAD
2014	OGS (declined)	15,000 CAD
2013-2015	David R. Cheriton Graduate Scholarship	20,000 CAD
2012	OGS	15,000 CAD
2012	University of Waterloo President’s Scholarship	10,000 CAD
2012	QEII-GSST	5,000 CAD
2011	NSERC USRA	4,500 CAD

Teaching

2018	MATH 525: Probability, University of Michigan (website: https://parsiad.github.io/MATH-525)
2011-2017	Teaching Assistant, University of Waterloo

Code

2015-Now	Maintainer of GNU Octave financial package (language: GNU Octave) Monte Carlo simulation, options pricing routines, financial manipulation, plotting functions and additional date manipulation tools.
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