Ibrahim Abdelrazeq

Curriculum Vitae

Contact Department of Mathematics Mobile: (509) 240-0186

Information Assistant Professor E-mail: iabdelrazeq@gmail.com

Rhodes College http://math.rhodes.edu/~abdelrazeqi 2000 North Parkway Address: 5646 Sycamore Woods Dr.

Memphis, TN 38112. Memphis , TN 38134.

RESEARCH INTERESTS Time series analysis, Models of Financial and Actuarial Mathematics, Lévy-Driven CARMA Models,

STS Parametric and Nonparametric Goodness of Fit Tests.

EDUCATION University of Ottawa, Ottawa, Canada

Ph.D. in Mathematics (Statistics & Probability), September, 2014

Dissertation Title: "Statistical Inference for Lévy-Driven Ornstein-Uhlenbeck Processes."

Supervisors: Prof. Gail Ivanoff & Dr. Rafal Kulik

New Mexico State University, New Mexico, USA

M.Sc. in Mathematics, August 2008 (Honor Certificate).

Yarmouk University, Irbid, Jordan

B.Sc. in Mathematics with Minor in Economics, 2004

ACADEMIC Assistant Professor EXPERIENCE

Rhodes College Academic Year 2015/2016- present

Visiting Assistant Professor

Whitman College Academic Year 2014/2015

Part-time Faculty

University of Ottawa Academic Years 2012-2014 Concordia University Academic Year 2009/2010

Instructor

New Mexico State University Academic Year 2008/2009

Teaching Assistant

Duties includes DGD (Discussion Groups), office hours, and marking/grading, Math Help Center Assistant:

University of Ottawa Academic Years 2010-1014 Concordia University Academic Years 2009-2010 New Mexico State University Academic Years 2007-2009

High School Teacher Amman-Jordan (2005-2006)

| TECHNOLOGY | ${f R}$ is my program of choice for most statistical analyses and teaching. | | | | | |
|-------------------------------|---|--------------|--|--|--|--|
| Courses Taught or Teaching | MATH 312 Mathematical Statistics, Rhodes College | Spring, 2016 | | | | |
| | MATH 111 Introduction to Applied Statistics, Rhodes College | Spring, 2016 | | | | |
| | MATH 311 Probability Theory, Rhodes College | Fall, 2015 | | | | |
| | MATH 111 Introduction to Applied Statistics, Rhodes College | Fall, 2015 | | | | |
| | MATH 345 Probability Theory, Whitman College | Spring, 2015 | | | | |
| | MATH 248 Statistical Modeling, Whitman College | Spring, 2015 | | | | |
| | MATH 247 Statistics with Application, Whitman College | Fall, 2014 | | | | |
| | MATH 128 Elementary Statistics, Whitman College | Fall, 2014 | | | | |
| | MAT 1339 Introduction to Calculus and Vectors, University of Ottawa | Summer, 2014 | | | | |
| | MAT 1322 Calculus II, University of Ottawa | Spring, 2013 | | | | |
| | MAT 1339 Introduction to Calculus and Vectors, University of Ottawa | Summer, 2012 | | | | |
| | MATH 206 Algebra & Functions, Concordia University | Spring, 2010 | | | | |
| | MATH 142G Calculus for Bio.& Manag., New Mexico State University | Spring, 2009 | | | | |
| | Calculus II Lab, New Mexico State University | Spring, 2008 | | | | |
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Courses Taught As Teaching Assistant Mathematical Models I, University of Ottawa.

Calculus I Lab, New Mexico State University

Introduction to Biostatistics, University of Ottawa.

Financial Mathematics (Actuarial Exams; FM/2 courses), Concordia University.

Fall, 2008

Differential Equation and Numerical System, University of Ottawa.

Linear Algebra, University of Ottawa.

Calculus II, University of Ottawa.

Calculus I, University of Ottawa.

Calculus Life Science, University of Ottawa.

Introduction to Calculus, University of Ottawa.

Math Help Center: All first and second year math and stat courses.

Publications

- I. Abdelrazeq, Model verification for Lévy-driven Ornstein-Uhlenbeck processes with estimated parameters. Statistics and Probability Letters, V: 104, P. 26-35, 2015.
- I. Abdelrazeq, B.G. Ivanoff, and R. Kulik, Model Verification for Lévy-driven Ornstein-Uhlenbeck Processes. *Electronic Journal of Statistics*, 8(1):1029-1062, 2014.

Papers in Preparation

- I. Abdelrazeq, B.G. Ivanoff, and R. Kulik, Goodness of fit test: Recovered noise of CAR(1) processes.
- I. Abdelrazeq, Model checking: Realized Volatility Model CARMA(2,1).

INVITED CONFERENCES

Lévy Driven CARMA(2,1): Checking the Model Assumption. 44th Annual Meeting of the Statistical Society of Canada May 29-June 1, 2016 at Brock University St. Catharines, Ontario.

Model Checking and Fitting: Lévy-Driven CARMA. Workshop in Stochastic Process in honor of Professor Gail Ivanoff, May 29, 2015, at University of Ottawa.

CONFERENCE PRESENTATIONS, SEMINAR PRESENTATIONS & WORKSHOPS

Goodness of Fit Test: Recovered Noise for CAR(1) Processes. Joint Mathematical Meeting, January 13, 2015, San Antonio, Texas.

Goodness of Fit Test: Recovered Noise for CAR(1) Processes. 42nd Annual Meeting of the Statistical Society of Canada May 25-28, 2014 at the University of Toronto, Toronto, Ontario.

Model Checking: Lévy-Driven Ornstein-Uhlenbeck Processes. Joint Mathematical Meeting, January 15, 2014, Baltimore, Maryland.

Model Verification for Lévy-Driven Ornstein-Uhlenbeck Processes. Seminar Presentation, December 13, 2013 at University of Ottawa, Ottawa, Ontario.

Model Checking: Lévy-Driven Ornstein-Uhlenbeck Processes. Statistical Society of Ottawa, 4th Annual Student Research Day, September 27, 2013 at University of Ottawa, Ottawa, Ontario.

Inference for Discretely Observed Lévy-Driven Ornstein-Uhlenbeck Processes. 41st Annual Meeting of the Statistical Society of Canada May 26-29, 2013 at the University of Alberta, Edmonton, Alberta.

Estimation and Modeling Problems in Financial Engineering Workshop, Bruno Rmillard, HEC Montral. 41st Annual Meeting of the Statistical Society of Canada May 26-29, 2013 at the University of Alberta, Edmonton, Alberta.

MAA Minicourse: Introductory statistics using randomization and bootstrap methods, JMM, Baltimore, Maryland.

Honors, Awards, and Grants

University of Ottawa Dean's Scholarship October, 2014.

University of Ottawa Part-time Professor Travel Grant, September, 2014.

University of Ottawa Part-time Professor Travel Grant, January, 2014.

The Best Presentation Award, SSO - 4th Annual Student Research Day, September 27, 2013.

FGPS Conference Travel Grants (Winter 2014), University of Ottawa.

Conference Travel Grants (Winter 2013), SSC, Edmonton.

FGPS Conference Travel Grants (Summer 2013), University of Ottawa.

Admission Scholarship, University of Ottawa (2010-1014).

ISM (Institute de Science Mathématiques) Scholarships for Doctoral Studies, Montreal, Canada (2009-2010).

The NMSU Leadership Scholarship Rewards Academic Achievement and Leadership (2008-2009).

Graduate Honor Certificate, New Mexico State University.

(ASNMU) Associated Students of New Mexico State University (Graduate Student's Senator 2008-2009).

Ottawa-Carleton Institution of Mathematics and Statistics, Ottawa, Canada

GRADUATE COURSES TAKEN IN USA & CANADA

| \mathbf{Course} | \mathbf{Grade} | \mathbf{Course} | \mathbf{Grade} |
|--------------------------------|------------------|--------------------------------------|------------------|
| MAT5194I: Time series Analysis | AUD | MAT 5171: Probability Theory II | A+ |
| MAT 5319: Martingale Theory | A+ | MAT 5190: Mathematical Statistics I | A- |
| MAT 5170: Probability Theory I | A+ | MAT 5191: Mathematical Statistics II | A |

Concordia University, Montreal, Canada:

| Course | Grade |
|--|-------|
| MATH & STAT 881G: Mathematical Finance | A |
| MATH & STAT 881C: Stochastic Calculus | A+ |
| MATH & STAT 881J: Applied Probability | A |

New Mexico State University, New Mexico, USA

| \mathbf{Course} | \mathbf{Grade} | \mathbf{Course} | \mathbf{Grade} |
|--|------------------|-------------------------------|------------------|
| STAT 562: Foundation of Probability | A | MATH 532: Partial Diff. Eqs. | A |
| MATH 540: Financial Engineering (D.R.) | A | MATH 592: Measure/Integration | A |
| STAT 571: Cont. Multivariant Analysis | A | MATH 593: Real Analysis | A |
| MATH 521: Financial Mathematics | A | MATH 541: Toplogy I | A+ |
| MATH 531: Ordinary Diff. Eqs. | A | MATH 542: Toplogy II | A+ |

References

Dr. Gail Ivanoff, Professor, Department of Mathematics & Statistics, University of Ottawa, givanoff@uottawa.ca (613 562-5800 Ext. 3501)

Dr. Rafal Kulik, Assistant Professor, Department of Mathematics & Statistics, University of Ottawa, rkulik@uottawa.ca (613 562 5800 Ext. 3526)

Dr. Pierre-Jrme Bergeron, Assistant Professor, Department of Mathematics & Statistics, University of Ottawa, pbergero@uottawa.ca (613 562 5800 Ext. 2030)