"A mathematician is a machine for turning coffee into theorems." – Alfréd Rényi

### Education

2007-2009 MSc - Applied Mathematics, The University of Western Ontario, London, Ontario.

Research area: Mathematical Biology

2003-2007 **BSc - Mathematics**, *Trent University*, Peterborough, Ontario.

Dean's Honour List, 2003-2007

### Master's Thesis

title The Evolution of Cooperation on Bipartite Networks

supervisors Dr Lindi Wahl and Dr Geoff Wild

description An evolutionary game theoretic model is developed to examine how network heterogeneity affects the evolution of cooperation.

# Experience

# Teaching and Education

2007–2009 **Teaching Assistant**, *The University of Western Ontario*, London, Ontario.

Lead tutorials and drop-in help sessions for students, graded tests and assignments and held regular

office hours for additional student help.

2005–2006 **Teaching Assistant**, *Trent University*, Peterborough, Ontario.

Assisted students in a lab-based physics for education students course.

2006-2007 **Grader**, *Trent University*, Peterborough, Ontario.

Graded homework assignments and tests for second-year calculus courses.

Summer 2005 Instructor, Trent Science Camp, Trent University, Peterborough, Ontario.

Lead the physics lab module for students in grades 6 to 8.

#### Vocational

2009-Present Research Associate, Cerebral Diagnostics Canada, Inc, Toronto, Ontario.

Conduct experiments, undertake statistical analyses, and develop in-house software for research in EEG

(Electroencephalography).

Summer 2006 Research Assistant, Department of Mathematics, Trent University, Peterborough, On-

Designed and developed a database of corporate ownership based on SEC filings as well as a microeconomic model of market dynamics.

# Teaching Assistant Experience

#### University of Western Ontario

- Applied Mathematics for Engineering II, Winter 2008, Winter 2009
- Linear Algebra For Engineering, Fall 2008
- Calculus for Engineering I, Fall 2007
- Calculus with Fundamentals I, Winter 2008

#### Trent University

• Physics for Teacher Education, Academic Year 2005-2006

51 Mount Dennis Dr • Toronto, Ontario M6M 5H5

Mobile: (647) 240-0691 • Home: (647) 341-0926 • joshua.m.grant@gmail.com

- Calculus III Vector Calculus (grader), Winter 2007
- Calculus II Multivariate Calculus (grader), Fall 2006

### Contributed Talks

June 2009 **Evolutionary Game Dynamics on a Bipartite Graph Network**, JM Grant, LM Wahl, G Wild, Canadian Applied and Industrial Mathematics Society Annual Meeting, University of Western Ontario.

London, Ontario

August 2008 **Sexual Moran Model: Theory and Computation**, JM Grant, LM Wahl, G Wild, Society for Mathematical Biology Annual Meeting, Centre for Mathematical Medicine, University of

Toronto, Ontario

# Other Scholarly Activities

Fall 2008 **Organizer, Mathematical Biology Group Seminar Series**, *Department of Applied Mathematics*, University of Western Ontario, London, Ontario.

Organized speakers and times for weekly seminar series of the mathematical biology research group.

May 2007 **Mathematical Biology Summer Workshop**, *Centre for Mathematical Biology, Department of Mathematics and Statistical Sciences*, University of Alberta, Edmonton, Alberta. Participated in two week mathematical biology workshop for advanced undergraduates.

August 2006 Atlantic Association of Research in the Mathematical Sciences Summer School, Department of Mathematics and Statistics, Dalhousie University, Halifax, Nova Scotia. Participated in month long summer school, taking graduate courses in wavelet theory and Internet mathematics.

Academic Year 2006-2007 **Executive, Mathematics Society of Trent (MASCOT)**, Department of Mathematics, Trent University, Peterborough, Ontario.

Undertook activities related to the mathematics community at Trent, including organizing social events and lecture series and developing faculty-student relations.

## Computer skills

Languages C, C++, Perl, BASIC, Bash Packages MATLAB, Maple, Octave, R, Boost

(C++)

Platforms Windows, Linux, Unix (Solaris) Office Software MS Office, OpenOffice, Photoshop

#### Interests

Linux Making the most out of my operating system

Cooking Trying to prepare everything from maki rolls to crème brûlée.

Guitar Been playing for 12 years

# References

- $\bullet$  Dr Lindi Wahl, Professor, Department of Applied Mathematics, The University of Western Ontario, (519) 661-2111 ext 88795, lwahl@uwo.ca
- Dr Geoff Wild, Professor, Department of Applied Mathematics, The University of Western Ontario, (519) 661-2111 ext 88784, gwild@uwo.ca
- Dr Albert Ler, Former Research Associate, Cerebral Diagnostics Canada Inc, (416) 408-2907, alersh@gmail.com
- Dr Marcus Pivato, Professor, Department of Mathematics, Trent University, (705) 748-1011 ext 7293, pivato@xaravve.trentu.ca