



## Welcome!

I am an Associate Professor of Actuarial Science in the Department of Statistics and Actuarial Science at the University of Waterloo.

I am interested in not only academic research in those areas including probability, statistics, actuarial science, finance and optimization, but also industry consulting projects and commercial adventure in relevant industries.

[MY CV](#)

### Office:

Room 3136  
M3-200 University Avenue West,  
Waterloo, ON, N2L 3G1, Canada.

### Tel:

519-888-4567 ext. 31132

### Email:

chengguo.weng@uwaterloo.ca

### Website:

www.chengguoweng.com

### Social links:



- Broad research interests
- Enthusiasm in industrial partnership
- Diversity of Education Experiences

**Chengguo.Weng.com**



# Optimal Decision with Uncertainty

- Optimal reinsurance
  - Vast portfolio selection
  - Risk prioritization
  - Pricing and hedging of insurance/finance products
- 
- Monte Carlo simulation
  - Data-driven
  - Partial information
  - Statistical learning

# Predictive Analytics

- Insurance premium rating
  - Customers behavior characterization
  - Prediction of economic factors
- 
- Personalized prediction algorithms
  - Enable price discrimination
  - Enable incorporation of large information



# Chengguo Weng

University of Waterloo

- Describe me your **Situations**
- Bring me your **Questions**
- Show me your **Data**



**Chengguo Weng, PhD**  
Associate Professor

**FACULTY OF MATHEMATICS**  
Department of Statistics and Actuarial Science  
chengguo.weng@uwaterloo.ca  
519-888-4567, ext. 31132 | fax 519-746-1875