

Vincenzo Coia's CV

2020-02-14

Work Experience

2017/01 - present

Lecturer of Data Science

(Initially: Postdoctoral Teaching and Learning Fellow)

Masters of Data Science Program, Department of Statistics

The University of British Columbia

Vancouver, BC

2019/05 - 2019/08

Part-time Flood Forecasting Consultant

BGC Engineering

Vancouver, BC

2009/05 - 2014/05

Short-term statistical consulting (6 projects)

UBC and private

Education

PhD in Statistics

2012/09 - 2017/02

The University of British Columbia

Conferred May 29, 2017

MSc in Mathematics and Statistics (Statistics)

2011/09 - 2012/08

Brock University

Conferred on October 13, 2012

BSc (3-year) in Biological Sciences

Minor in Earth Sciences

2005/09 - 2011/04

Brock University

Conferred "With Distinction" on October 22, 2011

BSc (Honours) Mathematics Integrated with Computers and Applications

Concentration in Statistics

2005/09 - 2011/04

Brock University

Conferred "With First-Class Standing" on June 7, 2011

Teaching

Course Involvement

The following is a table of courses that I've been either lecture or lab instructor for. They all took place at UBC.

Course	Title	Involvement
BAIT 509	Business Applications of Machine Learning	Instructor, 2 years
STAT 545A	Exploratory Data Analysis, Part I	Instructor, 3 years
STAT 547M	Exploratory Data Analysis, Part II	Instructor, 2 years
DSCI 511	Programming for Data Science	Lecture and Lab instructor, 2 years
DSCI 531	Data Visualization I	Lecture instructor, 2 years; lab instructor, 1 year
DSCI 562	Regression II	Lecture Instructor, 1 year; Lab Instructor, 3 years
DSCI 551	Probability for Data Science	Lecture Instructor, 1 year
DSCI 561	Regression I	Lab Instructor, 1 year
DSCI 571	Supervised Learning I	Lab Instructor, 1 year
DSCI 532	Data Visualization II	Lab Instructor, 2 years
DSCI 573	Feature and Model Selection	Lab Instructor, 1 year
DSCI 563	Unsupervised Learning	Lab Instructor, 1 year
DSCI 553	Statistical Inference and Computation II (Bayesian Statistics)	Lab Instructor, 1 year
DSCI 574	Spatial and Temporal Models	Lab Instructor, 2 years
DSCI 554	Experimentation and Causal Inference	Lab Instructor, 2 years
DSCI 591	MDS Capstone Project	Supervised 8 student teams over 3 years

Course (Re-) Developments

I've been involved with the redevelopment of the following courses:

- DSCI 561: Here, I lead a team and supervised one graduate student to redevelop the labs.
- DSCI 562: Both lectures and labs
- DSCI 531: The lectures one year, then the labs the following year.
- DSCI 532: Here, I lead a team and supervised two TA's to redevelop the labs.
- DSCI 574: The labs.

I've been involved with the development of the following courses:

- DSCI 591: I helped develop the capstone course with my colleagues.
- BAIT 509: I used DSCI 571 as inspiration for developing this course.

Some courses have been partially redeveloped.

- STAT 545A/547M: Some redevelopment of content; much redevelopment on course website and infrastructure.
- DSCI 551: Some redevelopment of lectures and lab to accommodate a problem-first approach.
- DSCI 554: The labs, after some shuffling of content to and from other parts of MDS.

Teaching Assistantships

Duration: From the latter part of my undergrad, to the end of my PhD.

UBC:

- **SCIE 300: Communicating Science** (5x)

Brock University:

- **MATH 4P82/5P82: Non-parametric Statistics**
- **MATH 3P82: Regression Analysis**
- **MATH 4P81/5P81: Sampling Theory**
- **MATH 3P81: Experimental Design** (2x)
- **MATH 2F40: Mathematics Integrated w/ Computers and Applications II**

Volunteer Positions

2016/09 - 2016/02

Science World at TELUS World of Science

Vancouver, BC

78.15 hours

2013/10 - 2014/05

Beaty Biodiversity Museum: Events Volunteer

Vancouver, BC

35.0 hours

2013/04 - 2013/09

UBC Farm

Vancouver, BC

102.5 hours

2011/06 - 2011/08

Project S.H.A.R.E. community garden

Niagara Falls, ON

15.0 hours

Research Assistantships

2013/05 - 2013/08

Robust penalized regression

Supervisor: Dr. Gabriela Cohen-Freue

Department of Statistics

The University of British Columbia

Vancouver, BC

2012/05 - 2012/08

2011/05 - 2011/08

2010/05 - 2010/08

Extreme value modelling

Supervisor: Dr. Mei Ling Huang

Department of Mathematics

Brock University

St. Catharines, ON

2010/09 - 2011/06

Quantum monte carlo simulations

Supervisors: Dr. Stuart Rothstein; Dr. Wai Kong (John) Yuen
Department of Chemistry and Department of Mathematics
Brock University
St. Catharines, ON

Publications and Talks

Articles in Preparation

- Coia, V., Joe, H., and Nolde, N. (2020?) Extreme Quantile Regression and the Copula-Marginal Composition Method. Status: Wrapping up the demonstration analysis

Articles Submitted to Refereed Journals

- Huang, M.L., Coia, V., and Brill, P.H. (2013) A cluster truncated Pareto distribution and its applications. ISRN Probability and Statistics 2013: Article ID 265373.
- Ayad, M., Coia, V., and Kihel, O. (2014) The number of relatively prime subsets of a finite union of sets of consecutive integers. Journal of Integer Sequences 17: Article 14.3.7
- Coia, V., and Huang, M.L. (2014) A sieve model for extreme values. Journal of Statistical Computation and Simulation. 84(8):16921710.

Articles Submitted to Conference Proceedings

- Huang, M. L., Coia, V., and Brill, P.H., A mixture truncated Pareto distribution, In JSM Proceedings 2012, Statistical Computing Section, Alexandria, VA: American Statistical Association, pp. 24882498.

Conference and Roundtable Contributions

- Coia, V. “The squared error has friends, too!” (Contributed Talk). SFU/UBC Joint Graduate Student Seminar (Winter). Spring 2019 at the SFU Harbour Centre, Vancouver, BC.
- Coia, V., Nolde, N., and Joe, H. Forecasting Extremes for Flooding (Invited Talk). The 44th Annual Meeting of the Statistical Society of Canada. May 29/June 1, 2016 at Brock University, St. Catharines, ON.
- Coia, V., and Jeanniard du Dot, T. (Invited Demonstration) “Using the Grammar of Graphics and Interactivity to explore Biologging Data in R”. May 6, 2015. Building a Bioanalytical Theory for Analysis of Marine Mammal Movements: A Peter Wall International Research Roundtable. The University of British Columbia, Vancouver, BC.
- Coia, V. “Flood Warning: An Application of High-Quantile Regression” (Contributed Talk). SFU/UBC Joint Graduate Student Seminar (Winter). February 28, 2015 at the SFU Harbour Centre, Vancouver, BC.
- Coia, V. “A New Sieve Model for Extreme Values” (Contributed Talk). SFU/UBC Joint Graduate Student Seminar (Fall). September 29, 2012 at the SFU Harbour Centre, Vancouver, BC.
- Coia, V., and Huang, M.L. “On Estimation of Heavy Tailed Distributions” (Contributed Talk). The 40th Annual Meeting of the Statistical Society of Canada. June 36, 2012 at the University of Guelph, Guelph, ON.

- Huang, M.L., Coia, V., and Brill, P.H. “A Mixture Truncated Pareto Distribution” (Contributed Talk). The 2012 Joint Statistical Meetings. July 28-August 2, 2012 at San Diego, California

Awards

University Issued

- 2012/09 - 2016/08: Four-Year Fellowship
- 2012/09 - 2016/08: Faculty of Science Graduate Award
- 2011/09: Dean of Graduate Studies Excellence Scholarship
- 2011/06/07: Dean’s Gold Medal
- 2011/06/07: Distinguished Undergraduate Student Award in Mathematics
- 2011/03: President’s Surgite Award

Nationally Recognized

- 2013/06: Governor General of Canada’s Gold Medal
- 2012/09 - 2015/08: NSERC Postgraduate Award (Doctoral, 3-year)
- 2011/09 - 2012/08: NSERC Alexander Graham Bell Canada Graduate Scholarship (Masters)
- 2010/05 - 2010/08: NSERC Undergraduate Student Research Award

Individual Donors

- 2012/04: Dr. Jack Lightstone & Dorothy Markiewicz Scholarship
- 2012/04: Dr. Raymond & Mrs. Sachi Moriyama Grad. Fellowship
- 2012/03: Tomlinson Entrance Scholarship for Excellence in Mathematics and Science
- 2011/06: John and Roslyn Reed Book Prize
- 2010/09: Art Bicknell Scholarship in Mathematics
- 2010/09: Ian D. Beddis Family Scholarship
- 2010/09: Terry and Sue White Mathematics and Science Scholarship
- 2007/09: M.J. (“Mel”) Farquharson Scholarship
- 2006/09: Scholler Foundation Scholarship in Chemistry

Athletic Awards

- 2016/04/03: Sportsmanship Award, UBC Thunderbirds Sport Clubs (Fencing)
- 2016/02/28: Bronze Medal in Senior Mixed Epee (Intercollegiate Tournament, UBC)
- 2015/11/16: Bronze Medal in Senior Mixed Epee (Remembrance Day Tournament, UBC)
- 2012/03/28: RM Davis Surgite Award
- 2009/12/12: First Place Award Winter Epeedemic, Toronto Fencing Club
- 2009/03: Varsity Fencing Rookie of the Year Award

Declined Awards

- 2012/04: Ontario Graduate Scholarship (Doctoral)
- 2011/05: Ontario Graduate Scholarship (Masters)

Professional Activities

Dept. of Statistics, The University of British Columbia:

- 2016/05 - 2016/06: **Search committee member (for CRC 2 faculty position)**
- 2015/04/30: **Organizer of the “How to Write an Awesome Abstract” workshop**
- 2014/06 - 2015/05: **Organizer of the SFU/UBC Joint Seminar**
- 2014/06 - 2014/09: **Organizer of the Graduate Student Trip**
- 2014/04 - 2015/05: **Co-founder of the Graduate Writing Forums**
- 2013/06 - 2014/05: **Statistics Graduate Student Representative**