Brandon Edwards

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Education

HONOURS BACHELOR OF COMPUTING | UNIVERSITY OF GUELPH | 2015 - 2020
- Major: Computer Science (Co-Op)
- Minor: Statistics
- Related coursework: Data Structures, Statistics I & II, Analysis and Design of Computer Algorithms, Object Oriented Programming, Operating Systems, Introductory Mathematical Statistics I

Experience

UNDERGRADUATE RESEARCH ASSISTANT | UNVERSITY OF GUELPH – SCHOOL OF COMPUTER SCIENCE | FEBRUARY 2016 - PRESENT
- Independently implemented a novel agent-based model to simulate Piping Plover breeding seasons using Python
- Cleaned and analyzed a large dataset of over 11,000 entries using R and Excel
- Co-authored a conference paper that was presented at the 2017 IEEE International Humanitarian Technology Conference
- Presented a research poster at the College of Physical and Engineering Sciences Undergraduate Poster Session (2016 and 2017)
- Presented a research poster at American Ornithology 2017 in Lansing, MI
- Co-authored a technical report making recommendations of total allowable catch (TAC) of a certain fish species

DATA ANALYST | UNVERSITY OF GUELPH – SCHOOL OF ENVIRONMENTAL SCIENCE | JANUARY 2016 – APRIL 2016
- Automated the compilation of 30 years of weather data from 9 weather stations into an Excel database
- Performed simple statistical analyses on past and future climate data
- Debugged and assisted in developing a soil physics database in Excel

WEB DESIGNER | ST. CLAIR CATHOLIC DISTRICT SCHOOL BOARD | JUNE 2013 – SEPTEMBER 2013
- Designed new website for two merging high schools using JavaScript, HTML, and CSS
- Communicated with officials from both high schools to determine what would best represent both high schools

CUSTOMER SERVICE REPRESENTATIVE | BEST BUY CANADA | NOVEMBER 2012 – JANUARY 2016
- Fulfilled customers' online and phone reservations in a timely manner
- Assisted with solving customer issues related to return policies or other store/company policies

Scholarships and Awards

CLUB MEMBER OF THE YEAR – UNIVERSITY OF GUELPH WILDLIFE CLUB   *2016/2017*
JAY MAJITHIA SCHOLARSHIP – UNIVERSITY OF GUELPH   *2016*
M.H. (MIKE) NICOLS SCHOLARSHIP PLAN – INSULATORS LOCAL 95   *2015-2017*
UNIVERSITY OF GUELPH ENTRANCE SCHOLARSHIP – UNIVERSITY OF GUELPH   *2015*

Presentations, Proceedings, and Papers

1) Gillis, D., **Edwards, B.P.M.,** Saba, M. (2017). *The Utility of Join Point Regression for Surplus Production Models.* To be submitted to Ecological Modelling

2) **Edwards, B.P.M.,** Gillis, D. (2017, August). *Modelling habitat loss in Piping Plovers using an environmental agent-based model.* Poster to be presented at American Ornithology 2017, Lansing, MI.

3) **Edwards, B.P.M.,** Gillis, D. (2017, August). *Using environmental agent-based modelling to simulate the breeding success of piping plovers.* Poster to be presented at the CPES Undergraduate Poster Session, Guelph, ON.

4) Rose, D., **Edwards, B.P.M.**, Kett, R., Yodzis, M., Angevaare, J., Gillis, D. (2017, July). *Exploring Anthropogenic Activities and Management Decisions Using a Novel Environmental Agent Based Model.* Paper presented at the IEEE International Humanitarian Technology Conference, Toronto, ON.

5) Rose, D., Kett, R., **Edwards, B.**, Requejo, F. (2016, October). *Modeling Lake Whitefish With Computer Systems Explained.* SON and University of Guelph Joint Council Meeting, Guelph, ON.

6) **Edwards, B**., Rose, D., Requejo, F., Rollins, E., Kett, R., Gillis, D. (2016, August)*. Improving efficiency of traditional agent-based models to investigate anthropogenic activities on a wild fish population.*   Poster presented at the CPES Undergraduate Poster Session, Guelph, ON.

Technical Reports

1) Rose, D., **Edwards, B.P.M.**, Kett, R., Gillis, D. (2017, July). *SON Bio-economic Modelling: The Development of An Environmental Agent Based Model for Assessing Anthropogenic Scenarios on Lake Huron Lake Whitefish (Coregonus clupeaformis)*. Technical Report University of Guelph and the Saugeen Ojibway First Nations.

2) Gillis, D., **Edwards, B.** (2016, July). *Total Allowable Catch – 2016.* Technical Report University of Guelph and the Saugeen Ojibway First Nations.

Technical Skills

· Agent-based model development in Python and Julia
· Data analysis, visualization, and interpretation of large datasets using Excel, R, and Julia
· Database development and maintenance using Microsoft Excel
· Proficient using C with basic and advanced data structures
· Version control experience using git for team projects and planning

Clubs and Organizations

WILDLIFE CLUB – UNIVERSITY OF GUELPH | 2015 – PRESENT

· Communications Executive – 2016/2017
· Club Member of the Year – 2016/2017

ONTARIO FIELD ORNITHOLOGISTS (OFO) | 2017

· Regular Member – 2017

SOCIETY OF CANADIAN ORNITHOLOGISTS (SCO) | 2017

· Regular member – 2017

Volunteer

COFFEE TO COMPOST | UNIVERSITY OF GUELPH | NOVEMBER 2016 – APRIL 2017

· Assisting with the collection and distribution of coffee compost bins throughout select coffee shops on campus