YI-CHIN TSENG (SUNNY) 1 +1 778-985-2258 • ☑ sunnyyctseng@gmail.com

EDUCATION

Master of Science, University of British Columbia

Department of Forest Resources Management

Vancouver, Canada

Sep.2017 - present

Supervisor: Bianca N.I. Eskelson

Committee: Kathy Martin and Nicholas C. Coops

Course taken: Advanced Biometrics (A+), Technical Communication Skills (A+), Multiple Regression Methods (A+), Ornithology (A), Advanced Remote Sensing (A+)

Online courses: Deep Learning in Python, Convolutional Neural Networks for Image Processing, Probability Theory and Mathematical Statistics

Bachelor of Science, National Taiwan University

Taipei, Taiwan

School of Forestry and Resource Conservation & Department of Physics

Sep.2012 - July.2017

Double Major Student

Supervisor: Biing T. Guan, Tzeng-Yih Lam, and Shi-Wei Chu

Forestry GPA: 3.96/4.0 (4.16/4.3 unconverted)
Physics GPA: 3.40/4.0 (3.48/4.3 unconverted)
Cumulative GPA: 3.65/4.0 (3.76/4.3 unconverted)

PUBLICATION

ARTICLES.

- o Tseng, Y.-C., Eskelson, B.N.I., Martin, K., and LeMay, V. **2020**. Automatic bird sound detection: Logistic model based acoustic occupancy model. *Avian Conservation and Ecology*. (In Preparation)
- o Tseng, Y.-C., and Chu, S.-W. **2017**. High spatio-temporal-resolution detection of chlorophyll fluorescence dynamics from a single chloroplast with confocal imaging fluorometer. *Plant Methods*, 13:43. (link)

NON-PEER REVIEWED ARTICLES.....

- o Tseng, Y.-C. 2019. Apply statistics on bird "listening". Discovery, 47(1). (In Press) (link)
- o Tseng, Y.-C. 2018. Can statistics help ornithologists "hear" birds? BranchLines, 29(3):11. (link)

CONFERENCE TALK.....

Canadian Wildlife Service Methods Seminar

Vancouver, Canada

Oct.2018

"Automatic bird sound detection: ARU data analysis"

International Ornithological Congress

Vancouver, Canada

Yi-Chin Tseng, Bianca N.I. Eskelson, and Kathy Martin

Yi-Chin Tseng, Bianca N.I. Eskelson, and Kathy Martin

Aug.2018

"Automatic bird sound detection: Logistic regression based acoustic occupancy model"

Manila, Philippines

International Forestry Students' Symposium

1..... 2011

Yi-Chin Tseng, Shi-Wei Chu

Aug.2015

"Chlorophyll fluorescence: A powerful tool for photobiology research"

CONFERENCE POSTER.....

Annual meeting of Ecological Society of America

Louisville, USA

Yi-Chin Tseng, Bianca Eskelson

Aug.2019

"Relationships between successive forest fires: A case study in central interior BC, Canada"

Annual Meeting of Soundscape Association

Taipei, Taiwan

Yi-Chin Tseng, Bianca Eskelson

Jun.2018

"Automatic bird sound detection: Logistic regression based acoustic occupancy model"

Focus On Microscopy

Bordeaux, France

[°] Yi-Chin Tseng, Shi-Wei Chu

Apr.2017

"High spatio-temporal-resolution detection of chlorophyll fluorescence from a single chloroplast with confocal imaging fluorometer"

ACADEMIC EXPERIENCE

Automatic Bird Sound Detection by Logistic Regression

UBC

Master Thesis (Funded by SAT)

Jan.2018 - present

Instructor: Valerie LeMay, Bianca N.I. Eskelson, Kathy Martin

Relationships between successive forest fires

UBC

Master Thesis (Funded by NSERC)

Sep. 2017 - present

Instructor: Bianca N.I. Eskelson, Nicholas Coops, Kathy Martin

Seasonal Variation of Bird Sound in Sakha Republic

Russian Academy of Science

Arctic Research Cooperation (Funded by TEEDF)

Instructor: Sergei Sleptsov

Apr.2017 – Aug.2017

Correlation Analysis of Tree Ring Characteristics

NTU

Undergraduate Research Project (Funded by MOST)

Sep.2015 - Feb.2017

Instructor: Biing T. Guan

Detection of Chlorophyll Fluorescence Dynamics from a Single Chloroplast

NTU

Undergraduate Research Project (Funded by MOST)

Instructor: Shi-Wei Chu

Mar.2015 - Nov.2016

Bayesian Statistic Modeling

Short-Term Research Program

Jul.2016 - Aug.2016

Freie Universität Berlin

Instructor: Stavros Veresoglou

Der Mogel – Bird Song Identification System (link)

NTU

Bachelor Thesis

Feb.2016 – Jun.2016

Instructor: Tzeng-Yih Lam

* SAT: Soundscape Association of Taiwan

* UBC: University of British Columbia

* NTU: National Taiwan University

 $*\ \mathsf{MOST} \colon \mathsf{Ministry}\ \mathsf{Of}\ \mathsf{Science}\ \mathsf{and}\ \mathsf{Technology}$

* NSERC: Natural Sciences and Engineering Research Council

* TEEDF: Taiwan Ecological Engineering Development Foundation

RECOGNITIONS

S	CHOLARSHIPS and RESEARCH GRANT	
0		nal Geographic Jun.2020
0	Mary and David Macaree Fellowship 3,500 CAD, Fellowship for conducting research in Forestry	UBC Sep.2019
0	VanDusen Graduate Fellowship in Forestry 500 CAD, Fellowship for students in Faculty of Forestry studying forest resource ecosystems	UBC Feb.2019
0	Hugh Robert Duncan Chisholm Scholarship in Forestry 230 CAD, Scholarship for conducting research in Forestry	UBC <i>Nov.2018</i>
0	Werner and Hildegard HESSE Fellowship in Ornithology 13,500 CAD, Fellowship for conducting research in Ornithology	UBC <i>Oct.2018</i>
0	Pei-Huang Tung and Tan-Wen Tung Graduate Fellowship 2,500 CAD, Fellowship for Taiwanese students pursuing higher education in Canada	UBC <i>Oct.2018</i>
0	Mary and David Macaree Fellowship 2,700 CAD, Fellowship for students in Faculty of Forestry studying forest resource ecosystems	UBC Sep.2018
0		Aug. 2018
0	Soundscape and Sound Research Scholarship 500 CAD, Scholarship for soundscape or sound associated research	SAT <i>Feb.2018</i>
0	Faculty of Forestry Strategic Recruitment Fellowships 12,000 CAD, Top 20% ranked student in each of the last two years of full time study	UBC Sep.2017
0	Arctic Research Cooperation Scholarship 6,500 CAD, Selected researcher for Arctic research project	TEEDF <i>Apr.2017</i>
0	College Student Research Scholarship 1,000 CAD, Excellent research proposal.	MOST Jun.2016
0	Alumnus scholarship in NTU Physics 3,000 CAD, 3 awardees per year for outstanding academic achievement	NTU Dec.2015
А	WARDS	
0	Master of Data Science TA Award 100 CAD, Best TAs in Master of Data Science program of the academic year.	UBC Jun.2019
0	3 Minute Thesis Award 250 CAD, First place of 3MT competition in UBC Faculty of Forestry	UBC Feb.2019
0	International Tuition Award 8,530 CAD, International graduate student registered full-time in research-oriented master's progra	UBC ams Sep.2017
0	College Student Research Creativity Award 1,000 CAD, Top 5% ranked research report	MOST Aug.2017
0	Outstanding Poster and Presentation Award 100 CAD, Ranked 1, out of 14 groups, in physics department poster competition	NTU <i>Apr.2016</i>
0	President Award	NTU Jan.2016

TEACHING ASSISTANT

Descriptive Statistics and Probability for Data Science **UBC** Instructor: Mike Gelbart (2018), Vincenzo Coia (2019) 2018 fall. 2019 fall Hold review sessions, attend labs, office hours Regression II **UBC** Instructor: Vincenzo Coia 2019 spring Deliver guest lectures, attend labs with topics covering generalized linear models, mixed effect models **Feature and Model Selection UBC** Instructor: Mark Schmidt, Varada Kolhatkar 2019 spring Attend labs for supervised/unsupervised machine learning, office hours **Advanced Biometrics UBC** Instructor: Bianca Eskelson 2018 fall Attend labs, office hours OTHER EXPERIENCE FIELD EXPERIENCE..... Recordist for Xeno-Canto Xeno-Canto One of my recordings for Siberian Crane was selected as homepage (profile). Jul.2017 - present Bander in iona island bird observatory Richmond, Canada Volunteer activity for migration monitoring Sep.2018 - present Leader in post-fire vegetation measurement Williams Lake, Canada PI: Bianca N.I. Eskelson. Measure post-fire vegetation for permanent plots Jun.2018 - Aug.2018 Recordist in Siberian tundra research team Siberia, Russia PI: Sergei Sleptsov. Record bird songs and calls in Siberia Arctic tundra Jul.2017 - Aug.2017 VOLUNTEERS and MEMBERSHIPS..... Volunteer in UBC Beaty Biodiversity Museum **UBC** Specimen preparation for museum demonstration and research purpose Sep. 2018 - present Member of UBC Birding Club UBC Participate events for birding Dec. 2017 - present Member of Christmas Bird Counting **National Audubon Society** Collect avian population data for use in conservation biology Dec. 2017 - present Volunteer for Modules in Ecology and Evolution Development Deliver lectures for grade 3 students about scientific research topics Mar.2019 - May.2019 Volunteer in NTU Herbarium NTU Introduce herbarium to public on weekends Mar.2015 - Mar.2016 **Volunteer in ELIV Social Enterprise** Cambodia Help Cambodia local residents build houses, restrooms and provide health education. Aug. 2013 CREDENTIALS Wilderness First Aid Certificate Canadian Red Cross

- o Standard First Aid CPR-C/AED Certificate Canadian Red Cross
- Open Water Diving Certificate PADI
- o Lifeguard License Chinese Taipei Water Life Saving Association