# TAYAB SOOMRO



Canada



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M.Sc. Agriculture @ Institute of Comparative Genomics, Dalhousie 2020-2022

University

2015-2020 B.Sc. (Honours) Bioinformatics @ Dept. of Comp Sci, University of

Saskatchewan

# **EXPERIENCE**

CEO @ PathoScan Technologies Inc. 2022 - Present

Bioinformatics Contrator @ University of Saskatchewan 2022 - Present

2020 - Present Computational Biologist @ NRGene Canada Inc.

2020 - 2020 Independent web dev contractor @ Luxsonic Technologies

2019 - 2020 Student Bioinformatician @ AAFC, Saskatoon

2017 & 2022 Teacher Assistant @ U of S & Dalhousie University

2017 - 2019 Student Research Assistant @ Links Lab University of Saskatchewan

Institutional IT Consultant @ U of S 2016 - 2017

### **COMMUNITY WORK**

2022 Judge @ 2022 Saskatoon Regional Science Fair.

2022 Judge @ 2022 Annapolis Valley Regional Science Fair

2020 Judge @ 2020 Saskatoon Regional Science Fair

# **AWARDS & CERTIFICATION**

2018 Undergraduate Student Research Assistantship (USRA) Award

Department of Computer Science, University of Saskatchewan

2015 Programming Contest Award - 1<sup>st</sup> Place Recipient

Department of Computer Science, University of Saskatchewan

| 2020        | MICAS – MinION Classification & Altering System                     |
|-------------|---|
| 2020        | MedCast360 @ Luxsonic – Immersive Video-sharing platform            |
| 2020        | GenoAssist – CLI tool for genome assembly automation                |
| 2018 - 2019 | OR Huddle - Software solution for surgeons. A start-up emerged from |

Med.Hack(+) hackathon held in Saskatoon.



### **MACHINE LEARNING PROJECTS**

- Soomro T, Singh A. (2020). Progress assessment of scrum daily meetings using NLP and machine learning.
- Soomro T, Singh A. (2020). **Predicting COVID-19 case numbers in Canada based on Twitter data.**
- Soomro T, Singh A. (2020). Comparison between SumBasic and Seq2Seq Auto Text-Summarization Techniques.

## **PUBLICATIONS**

- Soomro T, Watts S, Migicovsky Z, Myles S. (2022). Cider and dessert apples: what's the difference? Plants, People & Planet. https://doi.org/10.1002/ppp3.10284
- <u>Soomro T</u>, Jordan M, Watts S, Migicovsky Z, Forney C, Song J, Myles S. (in preparation).
  Harvest Date Shapes Apple Volatilome. Horticulture Research.

# **INVITED TALKS**

- Canadian Society of Horticulture Science Annual General Meeting (2022). **The aroma of apples.**
- Kentville Research & Development (KRDC) Series (2022). **Exploring the genetic basis of aroma production in apples**.
- Institute of Comparative Genomics (ICG), Dalhousie University (2022). *Introduction to pan-genomes and how to create one?*
- UC Davis Plant Sciences Symposium (2022). The genetics of apple aroma.
- Institute for Comparative Genomics (ICG), Dalhousie University (2022). **Understanding** the genetic basis of aroma production in apples.

# **CONFERENCES ATTENDED**

- Genomes of Animals & Plants (GAP) Conference 2022 Virtual Conference
- Plant and Animal Genomes (PAG) Conference 2022
  San Diego, CA, United States
- American Association for the Advancement of Science (AAAS) Conference 2020 Seattle, WA, United States
- Mobilizing the Plant Phenotyping and Imaging Research Centre (P<sup>2</sup>IRC) Symposium 2018 Saskatoon, SK, Canada
- Annual Plant Phenotyping and Imaging Research Centre (P<sup>2</sup>IRC) Symposium 2017 Saskatoon, Canada

# **POSTER PRESENTATIONS**

- Masood F, Thebeau J, <u>Soomro T</u>, Bezerra S.M, Jose M.S, Obshta O, Biganski S, Markova S, Camilli M, Raza M.F, Simko E, Ruzzini A, Wood S. (2023). **Antibiotic resistance and genomic characterization of North American Melissococcus plutonius isolates**. WCVM Graduate Student Poster Day, Saskatoon, SK
- Obshta O, Zabrodski M. W, <u>Soomro T</u>, Wilson G, Masood F, Thebeau J. M, Silva M. C. B, Biganski S, Kozii I, Koziy R, Raza M. F, Jose M. S, Camilli M, Markova S, Moshynskyy I, Ruzzini A, Simko E, Wood S. C. (2023). Genetic determinants of oxytetracycline resistance in *Paenibacillus larvae* from Saskatchewan beekeeping operations. WCVM Graduate Student Poster Day, Saskatoon, SK, Canada

- Soomro T, Napper S, Bonham-Smith PC. (2020). Investigation of the Arabidopsis thaliana kinome after infection with Plasmodiophora brassicae and establishment of clubroot. American Association for the Advancement of Science, Seattle, WA, USA
- <u>Soomro T</u>, Links MG. (2018). **Increased Usability of the MinION**. Mobilizing the Plant Phenotyping and Imaging Research Centre Symposium, Saskatoon, Canada
- Soomro T, Links MG. (2018). Sequence & Forget: A new paradigm for MinION DNA Sequencing. Research Fest: Department of Computer Science, Saskatoon, Canada
- Dowhy T, Soomro T, Links MG. (2018). Interactive Exploration of Base-calls in Nanopore Data. London Calling 2018, London, United Kingdom
- Dowhy T, <u>Soomro T</u>, Links MG. (2017). Visualization of Nanopore Data with API Access to Data. Nanopore Community Meeting, New York City, NY, USA
- Dowhy T, Postnikoff DL, <u>Soomro T</u>, Town JR, Ready, Dumonceaux TJ, Links MG. (2017).
  Base-Call Event Detection on Nanopore Data Using Wavelets. Annual Plant Phenotyping and Imaging Research Centre Symposium, Saskatoon, Canada
- Dowhy T, Ready B, <u>Soomro T</u>, Armitage A, Links MG. (2017). Configuring Virtual Toolboxes with Ansible. Annual Plant Phenotyping and Imaging Research Centre Symposium, Saskatoon, Canada