Madhuran Thiagarajah BSc., MLT

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mthiagar.github.io github.com/mthiagar

Employment

University Health Network - Genetic Technologist

Toronto, ON

March 2015 - April 2018

- Molecular profiling of tumor samples using NextGen sequencing and other molecular techiques such as MLPA and Sanger sequencing
- Performed analysis on NGS sequencing data
- Worked as effective member in a highly collaborative team environment
- Took part in various continuing education events such as lectures, workshops, conferences etc.
- Participated in journal clubs and reviewed and presented journal article on machine learning in genetics and genomics

Clinical Placements

Mount Sinai Hospital - Student Genetic Technologist

Toronto, ON

Sept 2014 - February 2015

- Performed routine and cytogenetic techniques such as: G-Banding, cell culture, fixation, FISH etc.
- Routine molecular genetics techniques such as:
 Nucleic acid extractions, sanger sequencing, MLPA, RFLP
- Worked with variety of samples including prenatal tissue, FFPE
- Worked on validation and protocol development for automated FFPE extraction
- Participated in several continuing education activies including: Genetic counsellor shadowing, medical rounds, amniocentesis observation, seminars etc.

University Health Network - Student Genetic Technologist Toronto, ON December 2014

- Performed routine karyotyping
- Performed routine cytogenetic cell processing, fixation and slide preparation
- Reviewed and presented journal club paper on cancer sequencing study design

Education

University of Waterloo

March 2017 - Current

Master of Health Informatics (MHI)

The Michener Institute September 2013 - Februrary 2015

Post Graduate Diploma - Genetics Techology

University of Waterloo September 2009 – April 2013

Bachelor of Science (BSc) - Biomedical Science

Professional Affiliations / Certifications

College of Medical Laboratory Technologists Ontario (CMLTO)

Member since August 2015. Licensed to Practice as a MLT - Genetics in Ontario.

References available. Please request.

Skills & Knowledge

Technical Skills Soft Skills

R Python ••• Teamwork Systems Thinking

Bash • Collaboration SQL • • Communication Node.Js • Public Speaking

Express.Js ••

Other

Medical Genetics, Cancer Informatics IGV, Clincal Trials, Molecular Biology, Population Health, Statistical Reasoning, Scientific Literature Review

Projects

Stayin Alive

Hack The North 2018 team project: Analysis and visualization for SNPs associated with time-to-event data (eg. adverse drug events). Tools: Python3 w/ Lifelines, pandas, & Bokeh libraries

Personal Website

Personal page to experiment with web-development, share information about myself, and to showcase projects

Tools: HTML, CSS, JS, Bootstrap

Volunteer & Activities

Hack the North 2018

Hacker/ Participant - Successfully completed and presented project. Attended talks and works shops on data science, web development and distributed computing.

Equithon 2018

General Volunteer - Assisted with set-up, tare-down, registration, and served food to participants.

UHN SPICE + B 2016

Summer Program In Clincial Epidemiology and Biostatistics -Learned about real world clinical importance of statistical reasoning and analysis. Completed workshop activities.

Self-Learning

Edx.org:

- •Introduction to Computer Science and Programming Using Python
- •Introduction to Computational Thinking and Data Science

Coursera.org:

- Data Analysis and Statistical Inference
- •Statistical Reasoning for Public Health