# Digital Health Technologies (DHT)



Class of 2025
Student Profile Booklet
Co-op Program 2024-2025

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### **DIRECTOR'S MESSAGE**

I am proud to announce that the MBiotech Program is now entering its 22nd year of delivering exemplary education and co-op opportunities to our outstanding students. For two decades, we have been privileged to have the strong support of our corporate sponsors, who have enabled us to provide a truly unique and life-changing educational experience. We are proud of the partnerships that have been established over the years and of the hard work of our students, staff, and faculty.

Our students continue to exemplify excellence in their science and business skills, innovative mindset, and creative thinking. I am honoured to be part of such a prestigious and talented community. We are very grateful for the ongoing support from our sponsors over the years and for their commitment to providing co-op experiences that are paramount to our program's success.

Let's celebrate 22 years of excellence and continue shaping the future of the life science ecosystem!



M. Cynthia Goh
Professor of Chemistry, Materials Science & Engineering, Chemical Engineering & Applied Chemistry, Medical Science, Management & Innovation
Acting Director, MBiotech Program

### MBIOTECH CO-OP PROGRAM - OVERVIEW

The Co-op Placement Program is a cornerstone of the MBiotech Program and is one of the most important and influential benefits offered to our students. This program consists of three courses (BTC 1900Y, 1910Y & 1920Y) and allows students to gain up to three credits toward graduation while also giving them the opportunity to participate in an experiential learning program in the workplace. With over 20 years of sustained relationships with major industry sponsors, the Program offers outstanding opportunities to benefit both students and sponsors alike. MBiotech students on their placements serve as ambassadors for the Program and their invaluable experience allows them to transition into their chosen field more seamlessly after graduation. This program is a key part of the MBiotech experience and offers the vital combination of classroom studies and workplace exposure for a well-rounded education.

For over two decades, MBiotech has cultivated strong relationships with leading companies in the biopharma, biotech, and digital health tech sectors, ensuring our students are provided with meaningful placement opportunities that can help jumpstart their careers. Through these placements, our students are granted the chance to gain practical knowledge and develop fundamental business and scientific skills in the field. We recognize the beneficial nature of such a collaboration, as our students' presence serves to showcase and bolster the brand excellence of both our partners and the University. As such, it is expected of them to show professionalism and commitment to the program and all its associated sponsors. Our track record speaks for itself, as we witness many graduates immediately transition into full-time positions and nearly all secure employment soon following graduation.

Dr. Nazeem Shamsuddin manages the internship portfolio for the MBiotech Program. Dr. Shamsuddin has a wealth of experience to help guide our students and employers through the entire hiring process and will be on hand to offer advice at every stage. He will provide mentorship to students pre- and post-placement, giving them the best advice and strategies to excel in highly sought-after opportunities. We urge our students to strive for these opportunities, as it will not only be invaluable for them but also be an exciting experience.

As we look forward to the future and sustaining our strong partnerships, we are confident that this Program will continue to prove successful for our students and sponsoring companies alike. Finally, I would like to thank our sponsors and corporate partners for showing their loyalty and support. You play a huge role in our success, and we are grateful for it!

#### MBiotech Placement Team



Dr. Nazeem Shamsuddin



Kinza Khan

### **DHT STREAM**

Digital Health Technologies (DHT) Program's focus of training is data science and will include advanced training in machine learning tools. It is a 2-year professional masters program that will involve 8-12 months of placement in industry through paid student internships. Students will learn about basic business, health, regulation and data science.

The digital health field is diverse and includes: bio-physics, mobile medical apps, health information technology, electronic medical records, software and cybersecurity, health information technology and wearable technology. DHT is an area that invites a spectrum of expertise that goes beyond engineering and design.

#### **DHT CURRICULUM**

DHT curriculum is comprised of 9.5 graduate course credits over a 24-month period on a full-time basis. These 9.5 credits are comprised of the following:

- 8 Science courses
- 3 Business courses
- 2 Programming courses
- 3 Work Term courses

#### **Science Courses:**

- Medical Device Reimbursement.
- Data Science in Health I.
- · Data Science in Health II
- Digital Ethnography in Health
- Introduction to IT consulting and Web Design
- · Data Science and Digital Health Technology
- Biopartnering Seminar I
- · Biopartnering Seminar II

#### **Business Courses:**

- Effective Management Practices
- Fundamentals of Managerial Concepts
- Management of Technological Innovation

#### **Programming Courses:**

- Intro to Computer Programming
- Information & Data Visualization in Science and Medicine

#### Work Term

- · Work Terms I, II and III
- Internship Placements

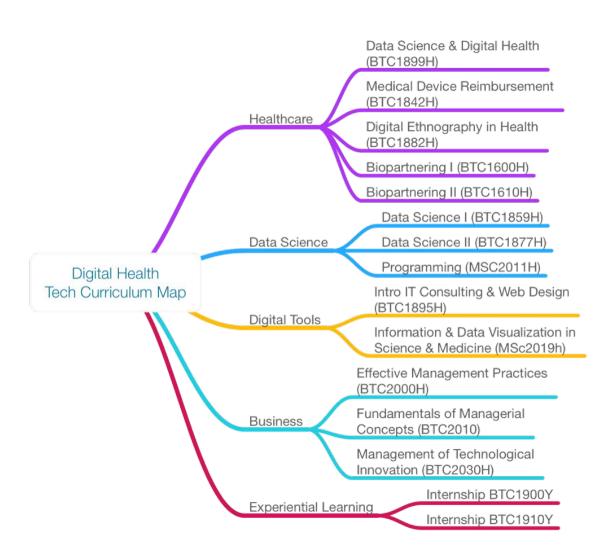
The DHT field involves three main pillars:

- 1. Health & Regulatory
- 2. Data Science
- 3. Business



Students will learn about chronic diseases and health & wellness related issues including emerging technology. Data science combines advanced statistical training with domain knowledge about healthcare and specific diseases, and students will be introduced to basic business concepts to understand profit drivers in this sector.

### DHT CURRICULUM MAP



### STUDENT QUALIFICATIONS

Training today's innovative scientists to become tomorrow's business leaders.

Our students have a professional mindset, as well as a broad spectrum of learning acquired through this innovative program that focuses on topics of special relevance in today's digital health space. Digital Health Technologies (DHT) stream prepares a new generation of professionals working in healthcare with a curriculum that has three main pillars: data science, healthcare regulation and business training.

#### Our Students' qualifications:

- Diverse graduate and undergraduate backgrounds in a wide-range of disciplines including (but not limited to): biology, chemistry, physics, public health, statistics, computer science, engineering, epidemiology
- Highly qualified, bright, committed individuals eager to learn and make the most of their internship opportunity
- Students learn an eclectic array of skills to tackle problems in the healthcare industry such as: machine learning, coding, data visualization, data cleaning, web design, medical device reimbursement, social media analytics and healthcare product regulation
- Future team leaders with a firm understanding of organizational skills and the importance of working together to benefit your team

Internships are arranged on a full-time, 4-month renewal basis and can be extended for up to 12 months. Placement timing is flexible and coordinated through the calendar year, commencing every May.

This Student Profile Directory is a guide created for employers and industry partners in order to introduce you to our students. The students presented in this guide are seeking 12-month work terms beginning in May 2024. Our students have multi-disciplinary science backgrounds combined with business aptitude, excellent communication skills and teamwork abilities. The versatile nature of DHT students will make them valuable contributors to your organization.

### Why Hire a DHT Student?

#### Excellent Recruitment Tool

• Students are rigorously pre-screened by the Program Office

#### **Co-ops Are Competitive**

 Our salary guidelines are in the range of \$28 - \$39 per hour, and as they are students no benefits packages are needed

#### Fringe Benefits For You

• Employers can benefit from substantial tax incentives! See the section on salary guidelines for more information

### **CO-OP RECRUITMENT & SCHEDULING**

As part of our unique program, students take up to three consecutive work-terms with top employers across Ontario and beyond. All internships are arranged through our Senior Research Associate, where each placement is full time. As such, co-ops can be extended/renewed up to a maximum of 12 months. Placement time is flexible and is coordinated throughout the calendar year.

Work Term 1: May to August Work Term 2: September to December Work Term 3: January to April

### CRITERIA FOR CO-OP PLACEMENTS

Each 4-month co-op term is classified as a required course for the DHT program. As such, students receive academic credit for each placement they successfully complete. Specific criteria must then be satisfied to ensure students receive appropriate credit. Please see below for a full listing of required criteria.

#### Co-op placements must:

- Be full-time (greater than 35 hours per week)
- Have a designated, qualified person responsible for evaluating the student's progress (please see adjacent section on `evaluation component')
- Provide the student with in-depth exposure to the employer's organization
- Be developed and/or approved as a suitable setting for higher learning
- Be monitored by the Placement and Employer Relations Manager
- Completion of Employer-Student Evaluation. For each 4-month work term the direct supervisor is required to submit a Student Evaluation in the form of a survey

### **SALARY GUIDELINES**

The work terms for DHT students are generally paid positions, with an average salary range of \$28-\$39 per hour. As DHT co-ops are students, salary packages generally do not need to include extended benefit plans. Employers may be eligible for the following **tax incentive program**, in regards to hiring DHT students:

#### Cooperative Education Tax Credit

The Co-operative Education Tax Credit (CETC) is a refundable tax credit. The CETC is available to employers who hire students enrolled in a co-operative education program at an Ontario university or college. The Canada Revenue Agency (CRA) administers the program on behalf of Ontario through the federal income tax system.

The CETC is based on salaries and wages paid to a student in a co-operative education work placement. The maximum credit for each work placement is \$3,000. Most work placements are for a minimum employment period of 10 weeks up to a maximum of four months.

For full details, please visit the Ontario Ministry of Finance Website at: <a href="www.fin.gov.on.ca/en/credit/cetc">www.fin.gov.on.ca/en/credit/cetc</a>.

### PROGRAM CONTACT INFORMATION

For more information on hiring an MBiotech student:

Nazeem Shamsuddin
Experiential Education Lead
Master of Biotechnology
INSTITUTE FOR MANAGEMENT & INNOVATION
Innovation Complex, KN 2258
3359 Mississauga Rd | Mississauga, ON L5L 1C6 | Canada
905-569-4736 | nazeem.shamsuddin@utoronto.ca
www.mbiotech.ca





### Stephanie Abrokwa

DHT

#### SUMMARY OF SKILLS AND ACHIEVEMENTS

- Received first rate-training in the biomedical sciences with an emphasis on drug discovery and technological developments
- Equipped with strong discovery research skills, business acumen, and a meaningful experiential connection to biomedical-related sectors
- · Strong work ethic, proactive nature, and unparalleled multi-tasking and problem-solving skills
- Extensive scientific background and previous work experience, alongside my fascination for the advancements within the biopharmaceutical industry
- Refined research inquiry and lab skills in the field of bacterial detection displayed through my senior research thesis in the McMaster Li Lab and my NSERC Promote Scholarship (2022–(2023)
- Demonstrated leadership initiative in my position as President for the Biomedical Discovery and Commercialization Society (2022–2023)
- Highly proficient in Excel, Powerpoint, Word, Google Sheets, ImageJ, and R

#### **EDUCATION**

- Master of Biotechnology, Digital Health Technologies stream, University of Toronto, Class of 2025
- Honours Bachelor of Health Sciences, Biomedical Discovery and Commercialization, McMaster University, Class of 2023
- Dean's Honour List (2020-2023), Graduated Summa Cum Laude (2023), NSERC PROMOTE (2022)

#### **EXPERIENCE AND QUALIFICATIONS**

- Summer Intern, Sun Life Financial work with a third party AI service provider, Axonify, to develop personalized training pathways for employees, work cross-functionally with various business departments
- Undergraduate Senior Research Thesis, McMaster's Li Lab focused on determining novel stabilization methods for DNAzymes to improve various bacteria detection methods
- NSERC Promote Research Intern, McMaster's Li Lab research involving lab curated DNAzymes
- President, Biomedical Discovery and Commercialization Society organized a platform exemplifying a growing need to reinforce the BDC program's sense of community and strengthen students' networks
- Summer Intern, Manulife Financial handled various forms of PII, utilized record keeping system (Apollo) to input and retrieve client-related information, secured client data input
- Summer Intern, Johnson and Johnson evaluated equipment reports to determine expiring warranties and current equipment status, worked cross-functionally with Finance, Customer Service, and Technical Service

#### PERSONAL INTERESTS

· Spin classes, plant-based cooking, travel, trying different cuisines, creative writing, music, fair-trade produce



### Shayli Babazadeh

DHT

#### SUMMARY OF SKILLS AND ACHIEVEMENTS

- Highly motivated, passionate, and detail-oriented with an eagerness to gain new expertise and contribute to the success of a team.
- Refined data analysis and programming skills cultivated through an independent research project examining brain networks using fMRI scans.
- Strong interpersonal and communication skills, honed through experience in advocacy and leadership roles.
- Dedicated team player and flexible problem solver as learned through various leadership roles and competitive volleyball.
- Exceptional written and verbal communication skills showcased through a comprehensive written report and a compelling final presentation for an undergraduate project.
- Solid foundation in IT consulting and web design with advanced skills in data cleaning and machine learning.
- Software proficiency: Tableau, Python, R, Git, Microsoft Office, SQL, and Cloud Computing, BMC.

#### **EDUCATION**

- Master of Biotechnology, Digital Health Technologies stream, University of Toronto, Class of 2025
- Bachelor of Science (Honours Specialization), Biology, Western University, Class of 2023
  - Dean's Honor List 2020-2023

#### **EXPERIENCE AND QUALIFICATIONS**

- Undergraduate Researcher, Brain and Mind Institute (Western University) Directed project discovering the functional connectivity of brain networks through states of consciousness
- Education & Outreach Coordinator, Penpals4peace Spearheaded educational improvement strategies, managed recruitment to expand the team, led fundraising efforts improvingyouth education outcomes locally and internationally.
- Independent Research Project, Western University (Simon Lab) Studied the effects of social isolation and social enrichment on Drosophila melanogaster's social space.
- Peer Support Assistant, Western Peer Support Demonstrated strong listening and interpersonal skills to provide peer support, increasing mental health resources for 1000 students.
- Science Councilor, Western's University Student Council Advocated for 6000 students in weekly council
  meetings and submitted policy papers on campus mental health and experiential learning to university
  administration.
- Marketing and Research Analyst, Rama Candles Created digital campaigns, collaborated with web designers, spearheaded content creation, and conducted R&D to improve candle formulations.

#### PERSONAL INTERESTS

• Healthy living (yoga, cycling, sports, vitamins), pottery, travel and exploration.



### Yun Hsiang Chang

DHT

#### SUMMARY OF SKILLS AND ACHIEVEMENTS

- Proactive team player with an eclectic professional background (spanning scientific research, marketing, and communications) and praised by employers for qualities such as diligence, creativity, enthusiasm, adaptability, and attentiveness to detail
- Perceptive communicator with leadership and interpersonal skills consolidated through summer jobs at UBC (notetaking and course facilitating) and 2,000+ hours teaching: currently as a writing instructor and laboratory teaching assistant; previously as a coach (Little Kickers) and code sensei (Code Ninjas)
- Proficient in R, Git, Tableau, Google Analytics, InDesign, WordPress, and Drupal, with foundational knowledge of HTML, JavaScript, and SPSS

#### **EDUCATION**

- Master of Biotechnology, Digital Health Technologies stream, University of Toronto, Class of 2025
- Bachelor of Science, Combined Honours in Biochemistry & Forensic Science, with Distinction, University of British Columbia and British Columbia Institute of Technology, Class of 2023

#### **EXPERIENCE AND QUALIFICATIONS**

- Research Assistant, PanGenomic Health Documented clinical/medicinal data and developed public-facing articles on natural remedies for supporting mental health
- Scientific Writer (Literature Reviews), DELIC Labs Contributed to 4 client-facing technical reports on enzyme applications
- Dietitian's Assistant, True NOSH Prepared Shopify orders and QuickBooks invoices and developed web copy, newsletters, and blog posts on nutrition
- Marketing Assistant, CrowdfundSuite Contributed creatives and/or research insights to support web, email, social, and ad content strategies
- Communications & Planning Coordinator, UTM Tasked with updating departmental webpages
- · Associate Editor, then Editor, BCIT Student Association Edited for 8 campus magazine issues
- Student Communications Assistant, UBC Faculty of Science Developed newsletters targeting ~9000 undergraduates and designed infographics
- Student Life Writer/UBC Life Writer & Content Creator/UBC Life Writer & Analytics Assistant, UBC Student Communications Services – (Co-)wrote ~90 undergraduate-facing blog posts and reported analytics

#### PERSONAL INTERESTS

• Reading widely, minimalism, trivia, fitness, and journalling (with daily entries since 2016)



### Ramiz Wali Khan

DHT

#### SUMMARY OF SKILLS AND ACHIEVEMENTS

- Diverse set of interpersonal skills attributed through multiple work and volunteer experiences in various disciplines
- Enjoys an ambitious and creative environment where initiative and innovation is praised
- Awarded community service award by the Honorary Hazel McCallion for participation as a frontline healthcare worker during the midst of the COVID-19 pandemic
- Well-Developed communication skills through course development and teaching in the fields of AI, coding, and data analysis
- Effective communication skills and thrives in teamwork situations with diverse and multifunctional members 2022 BDC Engage, Best third year pitch, Group F
- Assorted knowledge in pharmaceutical industry including drug discovery and commercialization through previous education
- Technical skills including: R, Python, PowerBI, Excel, with introductory knowledge of Tableau, LaTeX, and SQL

#### **EDUCATION**

- Master of Biotechnology, Digital Health Technologies stream, University of Toronto, Class of 2025
- Bachelor of Health Sciences (Honors), Biomedical Discovery and Commercialization, Summa Cum Laude
   McMaster University, Class of 2023

#### **EXPERIENCE AND QUALIFICATIONS**

- Teaching Assistant, University of Toronto Leading tutorials and discussions in courses, AI in Medicine (MSC 1114) and Biological Data with R (BIO 259), under the supervisors Dr. Pascal Tyrrell and Dr. Alex Nguyen, respectively
- Course Developer, Institute of Medical Science, University of Toronto Collaborated with Dr. Tyrrell to augment dissemination of AI in medicine education to students in regions including Mexico & Costa Rica.
- Thesis Student, Department of Biochemistry and Biomedical Science, McMaster University Research project supervised by Dr. Gupta in computational genomics, involving analyses over 400 prokaryotic genomes using data analysis techniques such as Python, MEGA, and online databases
- Clerical Assistant, Trillium Health Partners Information-based clerical role utilizing EPIC to complete daily patient tasks, chart maintenance, and digitizing records/SOP's
- MSU Volunteer, Student Walk Home Service Team Managed a late night campus walking team with the hopes of increasing campus security and safety

#### PERSONAL INTERESTS

- Machine Learning in biomarker detection, EHR and big data extrapolation
- Sports (Basketball, Volleyball, MMA), fitness, and spending time with family



### Taha Khanbhai

DHT

#### SUMMARY OF SKILLS AND ACHIEVEMENTS

- Highly curious, results-driven student dedicated to achieving excellence in every task.
- Exceptional leadership, work-ethic, and collaboration skills acquired from 10+ years of playing competitive soccer and serving as captain of the team.
- Technical proficiency in R, Python, Excel, Powerpoint, and Tableau.
- Entrepreneurial mindset, demonstrated through invention and proposed implementation of novel biotechnologies in undergraduate seminar courses.
- Proficient critical thinking and data analysis skills, attained through academic coursework and in role as analyst for Queen's Sports Analytics Organization.
- Excellent written and verbal communication skills developed through academic presentations, research papers, and experience working in team environments.

#### **EDUCATION**

- Master of Biotechnology, Digital Health Technologies stream, University of Toronto, Class of 2025
- · Honours Bachelor of Science, Specialization in Biotechnology, Queen's University, Class of 2023
  - Dean's Honours List (2019-2023), Graduated with Distinction (2023)

#### **EXPERIENCE AND QUALIFICATIONS**

- Lab Assistant, Bendena/Chin-Sang Labs, Queen's University Provided consult, autonomously conducted lab experiments such as PCR and gel electrophoresis, and performed comprehensive analysis of results in the investigation of sleep regulatory pathways in *C. elegans*.
- Undergraduate Thesis, Bendena Lab, Queen's University Conducted research and analysis on sleep behaviour of self-designed overexpression strains of *C. elegans*, aiming to explore gene interactions involved in the onset of narcolepsy.
- Communications Analyst, Xplore Communications Inc. Performed extensive research on the online presence of Xplore to effectively design and implement a novel social media plan, successfully increasing customer engagement.
- Communications Director, Queen's Helping Young People Excel Managed social media and email communications, increased club awareness through the organization of successful outreach events, and provided one-on-one biology tutoring to high school students.
- Server, Olivea Restaurant Demonstrated high-level communication, collaboration, and time-management skills by providing high-quality service to customers.

#### PERSONAL INTERESTS

Team Sports, Travelling, Financial Markets, Golf, Hiking, Artificial Intelligence, Personal Fitness.



### Leen Madani

DHT

#### SUMMARY OF SKILLS AND ACHIEVEMENTS

- Tenacious, well-organized, and collaborative professional committed to continuous growth and learning.
- Exhibits a personable nature, easily establishing rapport with individuals from diverse backgrounds and fostering meaningful connections.
- Demonstrates excellent verbal communication skills through dynamic participation in group discussions and delivery of engaging presentations.
- Exceptional leadership qualities through independent research, TA roles, and involvement in academic clubs.
- Strong skillset in graphic design and data visualization utilizing Canva, Biorender, and Tableau, refined through science communication courses and INTBIOTECH Certificate in Graphic Design for Scientists.
- Proficient in R, Excel, Covidence, EPPI-Reviewer for quantitative reasoning, data extraction, and analysis, with 4 years of experience in epidemiology research.
- Introductory knowledge in Python and C.
- Fluent in English and Arabic, with elementary proficiency in French.

#### **EDUCATION**

- Master of Biotechnology, Digital Health Technologies stream, University of Toronto, Class of 2025
- Honours Bachelor of Science in Translational and Molecular Medicine (TMM), Faculty of Medicine, University of Ottawa, Class of 2023
  - Dean's Honour List 2019-2023; Entrepreneurial Mindset Certificate, 2021

#### EXPERIENCE AND QUALIFICATIONS

- Teaching Assistant, University of Toronto (BIO429H5F Data Analysis in Neurobiology): Assisted fourthyear undergraduates in mastering data analysis techniques for neuroscience datasets through tutorials.
- Researcher (Honours thesis), Rudner Lab: Awarded the NSERC scholarship for pioneering bacteriophage research, resulting in presentations at four conferences.
- Research Assistant, Bruyère Institute: Contributed to health equity and aging research projects. Published in BMC Public Health, BMJ Open, and Alzheimer's & Dementia.
- Teaching Assistant, University of Ottawa (TMM3009 Biomedical Research Laboratory): Mentored and guided 16 third-year undergraduates, conducted experiment demonstrations, provided individualized handson assistance, and ensured prompt grading of notebooks.
- Co-President, MEDLIFE, University of Ottawa: Led a non-profit enhancing access to basic necessities and organizing trips to South America. Conducted interviews and ensured equitable task distribution.
- Social Media Executive, UO-BLOOD, University of Ottawa: Created graphic materials to raise awareness
  about blood donations. Collaborated with Canadian Blood Services to establish mobile donor clinics.

#### PERSONAL INTERESTS

• Large language models, entrepreneurship, graphic design and aesthetics, cooking, travel, and reading.



### Christopher Meile

DHT

#### SUMMARY OF SKILLS AND ACHIEVEMENTS

- Highly motivated, adaptable, and diligent with an affinity for problem-solving in the field of digital health.
- Over 3+ years of working experience in driving information technology projects within the life sciences and pharmaceuticals.
- Technical proficiency in: R, Python, SQL, PowerBI, Tableau, PowerApps, Excel, Databricks, ServiceNow.
- Proficient in project management: JIRA, Agile, VFQ, defect management, version control.
- Experience with ETL processes, data management, and data validation.
- Experience working with Veeva CRM, including Engage & Engage Connect to drive innovation sales.
- Strong understanding of B2B project management, including the creation of risk assessments, master service agreement, POs and privacy impact assessments.
- Demonstrated entrepreneurial spirit and creative mindset through successful scaling of a DTC startup.

#### **EDUCATION**

- Master of Biotechnology, Digital Health Technologies stream, University of Toronto, Class of 2025
- Honours Bachelor of Science, Economics & Cognitive Science (Computational Cognition), University of Toronto, Class of 2021. President's Scholar of Excellence

#### **EXPERIENCE AND QUALIFICATIONS**

- Technical Associate, GlaxoSmithKline Led diverse IT projects within Commercial and Medical operations, including a mobile messaging application implementation for field force and HCPs, mission-critical data validation/ETL projects, and the development of a PowerBI PM dashboard leveraging JIRA cloud REST API integration.
- Life Sciences Business Account Manager, Amaris Consulting coordinated >\$1.4m of IT delivery projects to life science clients within Canada. Pioneered new business partnerships and drove project success through the creation of MSAs, POs, and SOWs.
- Software Development Engineer Intern, Novartis championed two projects at the Stein manufacturing plant (Switzerland). These include the transition of a unique employee ID generating script to a cloud database/dashboard and the development of an android application for facility services.
- Co-op Student, Cyberworks Robotics drove the development of a new website and created a SEO plan to increase engagement. Collaborated with leadership on the creation/presentation of decks and financial forecasts for venture capital partners.

#### PERSONAL INTERESTS

· Cycling, football (soccer), photography, and entrepreneurship.



### Alanna Olteanu

DHT

#### SUMMARY OF SKILLS AND ACHIEVEMENTS

- Self-driven and adaptable individual, eager to push personal boundaries and foster a positive atmosphere to inspire and uplift colleagues in the workplace
- Effective leadership and teamwork skills gained by experience as an elected member to leadership committees, through event planning, and team-based research
- Strong verbal and written communication skills demonstrated through the ability to convey complex ideas clearly and concisely to diverse audiences, facilitating seamless collaboration, and ensuring project success
- Enhanced creative thinking fostered by engaging in creativity-boosting activities
- French reading, writing, and speaking, honoured by the DELF B2 Level Certificate
- · Romanian reading, writing, and speaking
- High proficiency in statistical & coding platforms such as R, Excel, and Tableau with introductory knowledge in Python

#### **EDUCATION**

- Master of Biotechnology, Digital Health Technologies stream, University of Toronto, Class of 2025
- Honours Bachelor of Science, Specialization Health and Biomedical Sciences with a Minor in Psychology, University of Windsor, Class of 2023
  - Dean's Honours List (2019-2023)
  - Graduated with Distinction (2023)
  - University of Windsor Alumni Association Student Leadership Award (2023)

#### **EXPERIENCE AND QUALIFICATIONS**

- President, University of Windsor Students' Alliance (UWSA) Acted as the Chief Executive Officer (CEO) and led the Executive members in the day-to-day tasks of student representation, advocacy, and services
- Vice-President Finance and Operations, University of Windsor Students' Alliance (UWSA) Acted as the Chief Financial Officer (CFO) and was responsible for overseeing the financial activities of the corporation, and managing all student groups on campus
- Teaching Assistant, University of Windsor Instructed and aided students in their Genetics course meanwhile provided support as they completed all the necessary assignments
- Research Assistant, Doucet Labs, University of Windsor Explored the aviation patterns of birds using ImageJ to determine their affinity to different produce colours
- Co-founder and President, The UWindsor Tennis Club Actively sought funding and support from local businesses, and held weekly club meetings for fellow members to meet and share their passion for tennis

#### PERSONAL INTERESTS

· Producing music, tennis, skiing, learning new languages, chess, attending concerts, and travelling



### Caroline Rodrigues

DHT

#### SUMMARY OF SKILLS AND ACHIEVEMENTS

- Proficient in R, Excel, SQL, and Tableau, leveraging these tools to extract insights and power data-driven decision-making.
- · Ability to analyze, interpret, and present information in time-sensitive and ambiguous situations.
- Proactive self-starter with a solution- oriented mindset, dedicated to enhancing project results.
- Effective and concise communication skills evidenced by presenting co-authored manuscripts at international research conferences.
- Committed to being an agent of change, demonstrated by actively seeking mentorship roles and engaging in strategic development initiatives to offer a unique outlook.
- Ability to achieve high-quality results both independently and within collaborative environments, exhibited through years of experience in community outreach and extracurricular activities.

#### **EDUCATION**

- Master of Biotechnology, Digital Health Technologies stream, University of Toronto, Class of 2025
- Honours Bachelor of Medical Science, University of Western Ontario: Class of 2022
  - Dean's Honours List (2019- 2022)

#### **EXPERIENCE AND QUALIFICATIONS**

- Health System Finance Coordinator, Ontario Health Oversaw 30+ executive leaders in the community
  and long-term care sectors, providing funding guidance and monitoring progress on targeted performance
  indicators.
- CanSaRCC Training Lead, Princess Margaret Hospital Led an engagement plan for 25+ incoming data entry specialists at a novel digital data registry. Spearheaded a data dictionary which increased efficiency of raw data extraction across 19 hospitals nationally.
- Research Student, University of Toronto Collaborated with machine learning and health economic experts to identify gaps in HTA Guidelines for new therapeutics and medical devices.
- Advocacy Commissioner, University of Western Ontario Implemented an external outreach program targeting 50 high school students in 2 cities in Ontario to bridge the gap between grade 12 and post-secondary STEM pathways.
- Tutor, Learning Disabilities Association Structured comprehensive 1.5-hour tutoring sessions for 1-3 students, resulting in improved self-reported confidence and increased program re-enrollment rates.

#### PERSONAL INTERESTS

• Soccer, Kickboxing, Health Economics.



### Maaryah Salyani

DHT

#### SUMMARY OF SKILLS AND ACHIEVEMENTS

- Strong analytical and critical thinking skills cultivated through data analytics & research contributions
- · Proficient in R, data analytics, Excel, Tableau Software, data cleaning, and IT consulting and web design
- Possess strong written and oral communication abilities demonstrated through conference paper publications and presentations, and Global Leadership project pitch to a judging panel
- Exemplary interpersonal skills developed through mentorship positions, patient interactions, coaching, and sales experience
- Problem-solving abilities and collaborative aptitude cultivated through research endeavours and noteworthy leadership positions, such as captain of the women's varsity squash team and a peer mentor
- · Exceptional academic skills demonstrated Dean's Honors List recognition (four consecutive years)
- · Can provide quality results under high-pressure environments, and easily adapt to changing conditions
- Well-developed time management skills exemplified through academic achievements, frequent engagement in hobbies, and work/volunteer commitments

#### **EDUCATION**

- Master of Biotechnology, Digital Health Technologies stream, University of Toronto, Class of 2025
- Bachelor of Arts, Kinesiology (Honors Specialization), Western University, Class of 2023
  - Dean's Honors List (4 years)
  - Western Admission scholarship (\$2500); Western Continuing Admission Scholarship (\$1000)

#### **EXPERIENCE AND QUALIFICATIONS**

- Novartis Summer Intern Developed fundamental skills for analyzing consumer data; learned how to conduct cold calls skillfully, and maintain customer relations
- Administrative and Technician Assistant, Medical Eye Consultants- Managed bookings with patients and arranged meetings with external service providers; performed diagnostic testing
- Sales Associate, Pickering College- Generated \$2000 in sales over the summer; tracked product demands, and developed invaluable customer service skills
- Research Volunteer, Unity Health Toronto- Collaborated with research team to examine the use of artificial intelligence in the detection of C-Spine abnormalities; conducted thorough analyses of CT spinal scans
- Peer mentor, Western University- Supported mentee in achieving academic goals through strategic goal planning; developed a strong relationship built on empathy, growth, and respect
- Global Leadership Program (2nd place award)- Designed and pitched the implementation of a telemedicine-based screening system to address diabetic retinopathy in remote Indigenous reserves
- Introductory finance and marketing education

#### PERSONAL INTERESTS

• Skiing, health and fitness, painting, spending time with family and friends, pursuing a career in sales (healthcare sector), and entrepreneurship in healthcare.



### Nishant Sarkar

DHT

#### **SUMMARY OF SKILLS AND ACHIEVEMENTS**

- Diligent, adaptable, and ambitious individual with a result-oriented mindset.
- Strong written and verbal communication skills in both scientific and commercial environments, developed through experience in academic research, professional roles, and community involvement.
- Demonstrated ability to work in multidisciplinary teams has collaborated with experimental and computational scientists, industry partners, and diverse stakeholders to achieve project goals.
- Excellent organization and time management abilities, refined through diverse independent project management and team leadership roles.
- Proficient in data visualization through Tableau, Power BI, Canva, and BioRender.
- Proficient in R and Microsoft Office Suite, with intermediate knowledge of Python and SQL.
- · Foundational knowledge of machine learning approaches to accelerate preclinical drug discovery.

#### **EDUCATION**

- Master of Biotechnology, Digital Health Technologies stream, University of Toronto, Class of 2025
- Honours Bachelor of Health Sciences with Distinction, Biomedical Discovery and Commercialization, McMaster University, Class of 2023
  - Dean's Honour List (2020-2023)

#### **EXPERIENCE AND QUALIFICATIONS**

- Graduate Research Assistant, University of Toronto Investigating the application of large language models for multiple sclerosis clinical decision making, under Dr. Jayson Parker.
- Content Writer, ICUBE UTM Spearheaded outreach to ICUBE startups to conduct interviews, write news posts, and create biweekly newsletters.
- Undergraduate Honours Thesis, Stokes Lab, McMaster University Leveraged in vitro techniques and
  constructed a computational pipeline to invent a novel assay for investigating the genetic determinants of
  antibiotic tolerance.
  - Authored Practical applications of machine learning for anti-infective drug discovery (ACS Medicinal Chemistry Reviews, 2023).
- Grants Specialist, Climate Action Consultancy Provided sustainability consulting to businesses by analyzing internal data, researching industry trends, and preparing reports for stakeholder meetings.
- Market Analyst, Goodself Facilitated the launch of the social media platform Goodself by recruiting over 5 000 healthcare professionals to the platform before launch.

#### PERSONAL INTERESTS

• AI in drug discovery, healthcare accessibility, hiking, reading, coffee brewing.



### Soumya Shastri

DHT

#### SUMMARY OF SKILLS AND ACHIEVEMENTS

- Committed to leveraging my skills and knowledge to contribute to the advancement and enhancement of innovation that improves patient care and outcomes
- · Highly proficient in R, SPSS, Tableau, and Excel with introductory knowledge in Python
- Strong understanding of regulatory requirements and standards for medical devices; obtained the 2021 Medical Devices Directorate (MDD) Recognition Award
- Proficient in the regulatory and reimbursement landscape of Canada; successfully developed a comprehensive medical device reimbursement plan.
- Gained research and information-gathering skills as honored by the Certificate of Valuable Contribution in Pediatric Research Training from the Children's Hospital of Eastern Ontario
- · Proficient in English, French, and Hindi, enabling communication with diverse stakeholders.
- Capable of delivering high-quality work both independently and as a team player.
- · Self-motivated and proactive; taking initiative and approaching tasks with unwavering energy and dedication

#### **EDUCATION**

- Master of Biotechnology, Digital Health Technologies stream, University of Toronto, Class of 2025
- Honours Bachelor of Health Sciences, Specialization in Technologies and Innovation in Healthcare, French Immersion Stream, University of Ottawa, Class of 2023
  - Summa Cum Laude; Dean's Honour List and Merit Scholarship (2019-2023)

#### **EXPERIENCE AND QUALIFICATIONS**

- Special Access Program Support, Medical Devices Directorate, Health Canada
  - Highly skilled in navigating complex medical device regulatory processes; Contributed to the development of the Appian Interface and Tableau dashboard to enhance communication with healthcare professionals, streamlining processes.
- Owner/Operator, Student Works Management Program
  - Oversaw a four-employee business with seasonal revenues surpassing \$25,000. Managed hiring, training, and operations, including marketing strategies, production, customer interactions, and quality control.
- Researcher and Planner, CSL Studio, City of Ottawa
  - Collaborated with the City of Ottawa directors to develop a novel health intervention program enhancing mental health and addiction service accessibility for homeless families in Ottawa.
- Assistant Editor and Editorial and Advisory Board Member, The URNCST Journal
  - Led various initiatives and networked with science and technology undergraduate organizations to promote undergraduate conferences.

#### PERSONAL INTERESTS

• Reading, swimming, learning new languages, playing the piano, and puzzle-solving



### Michelle Starkell

DHT

#### **SUMMARY OF SKILLS AND ACHIEVEMENTS**

- · Highly determined and resourceful individual motivated by continuous learning and problem-solving
- · Strong understanding of research and clinical processes gained through extensive lab experience
- Demonstrated advanced oral and speaking skills through high achievement in thesis report and presentation
- Proven adaptability showcased through accomplishments spanning diverse fields including finance, biochemistry, information management, and data science
- Excellent teamwork ability honed through collaborative school projects and professional work environments, consistently meeting high standards of work
- Effective time management skills demonstrated by balancing full-time coursework, 150+ volunteer hours, a thesis project, and a part-time job whilst achieving a 4.3 GPA in final two years of undergraduate degree
- Proficient in R, Tableau, Excel, Word, and PowerPoint

#### **EDUCATION**

- Master of Biotechnology, Digital Health Technologies stream, University of Toronto, Class of 2025
- Bachelor of Health Sciences (Honours), Health Sciences, Queen's University, Class of 2023
- Principal's Scholarship (2019), Dean's Honour List (2019–2021) with Distinction (2021–2023), NSERC-USRA (2022)

#### **EXPERIENCE AND QUALIFICATIONS**

- Records Classifier/Reviewer, Royal Canadian Mounted Police Conducted reviews, classification, and maintenance of administrative records through GCdocs and iRIMS electronic management systems, playing a pivotal role in optimizing workflow systems and large-scale filing projects
- Undergraduate Thesis Project, Jia Lab, Queen's University Investigated the role of polyphosphate and YY1 in gene and protein expression, identifying involvement in protein-DNA interactions and phase separation
- NSERC-USRA Research Assistant, Jia Lab, Queen's University Conducted literature reviews and biochemical assays to elucidate polyphosphate's regulatory role in signaling pathways and proteins
- Summer Intern (Group Retirement Solutions), Manulife/John Hancock Processed 25+ high-volume financial transactions per day, surpassing service level expectations and streamlining processing workflows
- Volunteer, Kidney Foundation of Canada Raised \$500+ and spread awareness for the foundation's annual kidney walk, contributing to the foundation's mission to reduce the burden of kidney disease
- Property Maintenance Worker, Lawn Rescue Maintained 10+ residential and 20+ commercial properties through collaborative and individually led efforts

#### PERSONAL INTERESTS

Reading, cooking, skiing, personal fitness, gardening, competitive soccer (Ontario cup finalists)



### Owen Treleaven

DHT

#### SUMMARY OF SKILLS AND ACHIEVEMENTS

- Diverse background in biomedical sciences and business economics through 3 medical technology industry internships and educational work.
- Advanced project management and communication skills gained through leading 18 presentations in 6 weeks for Hillrom's new e-commerce platform and coursework.
- Proficiency with data analysis and visualization, including R, Excel, Tableau, and Canva with introductory knowledge of Python and Blender.
- 2022-2023 Life Sciences Ontario (LSO) Scholar, recognized for understanding of the life sciences industry and drive to advance the future of the sector.
- Leadership experience demonstrated by clinical research project and manager of weekly literacy program.
- Graduate Student Representative Digital Health Technologies stream 2025.

#### **EDUCATION**

- Master of Biotechnology, Digital Health Technologies stream, University of Toronto, Class of 2025
- Bachelor of Science Honours (Distinction), Major: Biomedical Sciences, Minor: Business Economics University of Guelph, Class of 2023

#### **EXPERIENCE AND QUALIFICATIONS**

- Internship and Undergraduate Research Assistant, McMaster University Lead author on a clinical study investigating the effectiveness and costs of severe asthma management strategies guided by airway inflammometry for 200+ patients.
- Professional Mentorship Program, LSO Paired with 3 professional mentors (primary
  - relationship: Business District Manager, Novo Nordisk) to develop understanding of life
  - science industry and business applications.
- Literacy Program Manager, United for Literacy Coordinated weekly literacy program
  - for 4 teams of 10 volunteer/elementary student pairs focused on improving reading,
  - writing, and math skills.
- Parts Business Administrator, Baxter Fulfilled prior role at Hillrom following merger with Baxter, while supporting the Capital side of the business, implemented a novel order flow process for customer service representatives and trained new employee.
- Parts Business Representative, Hillrom Facilitated 75+ medical device orders per week and developed and delivered 18 customer presentations using Microsoft and Oracle software in 6 weeks on Hillrom's new e-commerce platform.

#### **PERSONAL INTERESTS**

· Financial markets, technology, AI, reading, snowboarding, team sports, golf, personal fitness



### Marek Konrad Twarog

DHT

#### **SUMMARY OF SKILLS AND ACHIEVEMENTS**

- Resourceful problem solver excelling in effective solutions through research and collaboration.
- Proficient in logical thinking, making informed decisions based on thorough analysis and evaluation of available options.
- Highly adaptable and personable, creating a comfortable and welcoming environment that fosters effective
  communication and collaboration.
- Exceptional emotional intelligence, accurately understanding people and situations.
- Strong work ethic, dedicated to delivering high-quality work and consistently meeting deadlines.
- Excellent communicator with the ability to maintain engaging and informative conversations.
- Quick learner adept at grasping complex concepts and seeking clarification with insightful questions.
- Proficient in a range of tools and software, including R programming, Tableau, Excel, PowerPoint, and Word, with some knowledge of Python.
- · Bilingual proficiency in English and Polish.

#### **EDUCATION**

- Master of Biotechnology, Digital Health Technologies stream, University of Toronto, Class of 2025
- Bachelor of Science, Cell Molecular Biology and Genetics, Minor: Chemistry, Wilfrid Laurier University, Class of 2021.
- Dean's Honours List, Wilfrid Laurier University, 2020, 2021.

#### **EXPERIENCE AND QUALIFICATIONS**

- Co-founder of Superior Clean and Seal Successfully started and operated a landscaping business, showcasing entrepreneurial skills and business acumen. Managed client relationships, project planning, and team coordination for high-quality services.
- Bricklayer Assistant at Polmar Inc. and Private Masonry Company Worked as a bricklayer assistant seasonally for over 6 years.
- COVID-19 Popup Vaccination Clinic Volunteer Enforced safety protocols and guided individuals seeking COVID-19 vaccinations.
- Dental Clinic Shadowing at Today's Family Dental, Dr. Leszczynski Dentistry, and Orchard Dental Care -Shadowed dentists and performed a variety of duties, accumulating over 250 hours of clinical volunteering.
- Computer Technician Self-employed computer technician responsible for building custom gaming PCs for clients.

#### PERSONAL INTERESTS

• AI, fishing, computers, finance, mechanics, electronics, tinkering, and volleyball



### Sanari <u>Wic</u>kramaratne

DHT

#### SUMMARY OF SKILLS AND ACHIEVEMENTS

- · Highly motivated individual with strong critical thinking skills and data-driven mindset.
- Proficient in R, Excel, SQL, SPSS, and introductory knowledge of Python.
- Experience with data visualization through Tableau through coursework and introductory knowledge of PowerBI.
- Foundational knowledge of artificial intelligence and machine learning applications within healthcare.
- Strong understanding of regulatory frameworks for consumer products and controlled substances through federal government work experience.
- Robust science communication through drafting scientific regulatory documents, technical guidance, and manuscripts through work experience and university coursework.
- Proven leadership and teamwork as VP of Events at Students Supporting University Health Network, leading a team of 10+.
- Outstanding research and data analytical skills through collecting and analyzing qualitative data and working on a systematic review and meta-analysis.

#### **EDUCATION**

- Master of Biotechnology, Digital Health Technologies stream, University of Toronto, Class of 2025
- Honours Bachelor of Science, Life Sciences Co-op, McMaster University, Class of 2022
  - McMaster Honour Award (2017), TELUS Health Scholarship (2017), Honour roll (2019–2022), McMaster University Senate Scholarship (2021), Graduated with distinction (2022)

#### **EXPERIENCE AND QUALIFICATIONS**

- Junior Regional Regulatory Compliance and Enforcement Officer, Health Canada Worked within the Cannabis Directorate to develop scientific regulatory documents and effectively communicate policy decisions for regulatory implications arising during health inspections of Cannabis license holders.
- Junior Product Safety Officer Co-op, Health Canada Interacted with industry professionals during Market Intelligence surveys to investigate if cosmetic products on the market were abiding by Cosmetic Regulations. Effectively responded to public inquiries for safe and responsible use of consumer products.
- Engineering Teaching Assistant, McMaster University Taught and led tutorials of 40 students for AI and Innovative Technologies undergraduate course. Aided students to think critically about the legal and governance questions involved in the implementation and deployment of AI systems.
- People Experience Specialist Intern, TELUS Digital Developed strong public speaking skills through
  presentation of a diversity and inclusion project to senior managers across Canada which resulted in the
  implementation of proposed D & I ideas into the onboarding process.

#### PERSONAL INTERESTS

• Artificial Intelligence policy and governance, oil painting, chess, cycling, and tennis.

### **NOTES**

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## University of Toronto Mississauga uoft.me/DHT

For more info: mbiotech@utoronto.ca



