JAMES **CHIELLA**

1116 College Street, Unit 3, Toronto, ON, M6H 1B6 · (416) 735-1903
james.chiella@gmail.com · LinkedIn · Website

I am a second-year life sciences student at the University of Toronto majoring in neuroscience and chemistry. I am very interested in medical research, particularly in the study of chronic neurological and psychiatric conditions. I have strong academic skills and experience in a research lab setting, both through my current work at the SickKids Research Institute and previously at the Sunnybrook Research Institute. I have completed several independent research projects, one of which I am currently preparing for publication. I am seeking a position where I can further develop my laboratory skills as I work toward my goal of applying to graduate studies in medical research.

EXPERIENCE

MAY 2023 – PRESENT

RESEARCH STUDENT, **SICKKIDS RESEARCH INSTITUTE**

- Working in **Kassner Lab** (translational neuroimaging lab with an emphasis on cerebrovascular disease) under the supervision of Dr. Andrea Kassner
- Conducted extensive literature review of disease pathologies, MRI protocols, study designs, and imaging techniques relevant to my projects
- Presented weekly updates and literature summaries to colleagues in lab meetings
- Currently developing a modular, multi-method processing pipeline for calculating cerebrovascular reactivity
- Designed, developed, and automated an image processing pipeline to analyze fMRI images from neurofibromatosis patients to study a novel biomarker for cerebrovascular disease
- Presented abstract and poster, entitled “Physiological fluctuations in white matter from rs-fMRI are increased in patients with neurofibromatosis type 1”, at the SickKids Summer Research Symposium
- Above abstract and poster were presented by Dr. Kassner at the ISMRM WHATEVER workshop
- Currently working towards publication of a manuscript based on the above abstract

SUMMER 2022

RESEARCH INTERN, **SUNNYBROOK RESEARCH INSTITUTE**

- Worked in **Focused Ultrasound Lab Group** (PI: Dr. Kullervo Hynynen) under the supervision Dr. Ryan Jones
- Analyzed quality assurance data from a focused ultrasound system currently used for the clinical treatment of essential tremor
- Performed data analysis, analyzed MRI imaging taken during the procedures, and evaluated overall stability of the ultrasound system using a series of scripts written in MATLAB
- Presented final report on my project to entire Focused Ultrasound lab group

SUMMERS 2020 & 2021

JUNIOR SOFTWARE DEVELOPER, **CPP SOLUTIONS INC.**

- Updated legacy application codebase and redesigned application to adhere to object-oriented programming methodology
- Developed and tested software payment, licensing, and installation system

EDUCATION

SEPT 2022 – PRESENT

BACHELOR OF SCIENCE, UNIVERSITY OF TORONTO

- Second year undergraduate student, double majoring in neuroscience and chemistry
- Current cGPA: 3.94
- Awarded the U of T Scholar, Helga and Frank Peroutka, and Johnson entrance scholarships, and the Alfred and Isabel Bader in-course scholarship

SEPT 2018 – JUNE 2022

HIGH SCHOOL DIPLOMA, EMILY CARR SECONDARY SCHOOL, VAUGHAN, ONTARIO

- Awarded the Governor General's Academic Medal, Academic Accomplishment Award, and Director's Achievement Award
- Grade 12 overall average: 99%

SKILLS

- Working knowledge of FSL (functional brain MRI software library)
- Fundamental wet lab techniques in chemistry and biology (gel electrophoresis, PCR, restriction enzyme digests, titrations)
- Basic statistical analyses using Python
- Strong knowledge of several programming languages including Python and MATLAB
- Windows, Linux, Visual Studio Code, Git, GitHub
- Microsoft Office (including Excel)
- Leadership and teamwork
- Organization and planning
- Time management
- Strong oral and written communication
- Detail-oriented problem solver
- Strong work ethic
- Excellent at independent work

OTHER ACTIVITIES

- Member of the Vic Chorus
- Secretary of First Year Residence Floor Council
- Playing Piano and Rock Climbing