#### Christian M. Denis

Website: cmdenis.com Work: christian.denis2@mail.mcgill.ca Location: Montréal, Canada Home: christianmdenis@gmail.com

#### GOALS

I would like to be part of a stimulating team pursuing physics related goals, and, hopefully, bring my own contribution. I am dedicated and a fast-learner. If given a task, I can work in an autonomous manner as well as in a team. The two things that captivate me the most are: the solving of elegant problems and the execution of creative (possibly artistic) tasks.

#### **EDUCATION**

## McGill University, Montréal

Honours Physics (B. Sc. A) Projected Graduation: Fall 2022

## John Abbott College, Ste-Anne de Bellevue

Arts and Sciences (DEC)

May 2019 R-Score: 33.939

## Collège Ste-Anne de Lachine, Lachine

Concentration Musique (DES)

July 2017 General Average: 89%

#### **SKILLS**

## Languages (spoken and written): French, English

Computer Skills: Solid programming skills in Python and Julia. Knowledgeable with LaTeX, Mathematica, JavaScript, HTML, CSS and Matlab. Competent with programs such as the Office Suite from Microsoft, GIMP, Pages (Apple) and Overleaf.

Data Analysis: Usage of Python, Julia and other statistical tools to analyze data **Driver's License:** Class 5 Permit (Canada)

#### **EXPERIENCE**

#### McGill Physics: Undergraduate Summer Intern

**Summer 2021** Internship as research assistant at McGill University within Paul François' theoretical biophysics research group. Worked on numerical computations for non-linear oscillators and 2D bifurcation diagrams (mainly Arnold Tongues) for variations of the radial isochron clock. This was applied to the modelling of the somite segmentation clock.

## Phytronix Technologies: Research Assistant

Summer 2020

CUM GPA: 3.96/4.00

Internship as research assistant at Phytronix technologies. Worked on the data analysis of a FAIMS system for the doctoral thesis of Johnathan Rochon (Université Laval, QC, Canada). Assisted the R&D department in the development of an automated pipetting robot. Used mass spectrometer to carry out a variety of tests. This involved a lot of Python programming for both the data analysis and the robotic manipulations.

## John Abbott College: Physics Tutor

2018 - 2019

Physics tutor for classes: NYA-Mechanics, NYB-Electricity and Magnetism and NYC-Waves and Optics

#### Kruger Packaging: Student Worker

June 2019 - August 2019

"Pillar" in the cardboard manufacturing process. Industrial equipment manipulation.

## Hydro Extrusion: Student Worker

June 2018 - August 2018

Mainly, usage of saws to cut aluminium. Heavy weights manipulation in a hightemperature environment.

École de ski Mont-Blanc: Ski Instructor

Winter 2016

Ski instructor, mainly for young kids

GRANTS	4 000 \$ grant from donors, for undergraduate summer research.	2021
	McGill Faculty of Science Scholarship - Dean's Honour List	2020
	Summer Internship Grant From BioTalent Canada 7 000 \$ grant for undergraduate summer research.	2020
	2nd Position at John Abbott College at CAP exams	2019
	Certificat du Mérite en histoire pour résultat scolaire exceptionnel	2017
	Prix Coup de cœur francophone (song lyrics)	2017
	Méritas d'excellence au collège Ste-Anne in a variety of classes 2012 -	2017
	Concours Soliste de Victoriaville (Provincial Music Contest) Bronze, Clarinet	2015
	Concours Soliste de Victoriaville (Provincial Music Contest) Silver, Clarinet	2013
ACTIVITIES AND INTERESTS	Executive Member of TVM (Student Television at McGill) 2021 - TVM is a student organization that produces video media, such as shorts, doctaries, and various other projects.	
	Member of the McGill Brewing Club  The McGill Brewing Club allows its members to have access to brewing equipment the production of Kombucha, Beer and other fermented beverages.	
	Participant in the 2020 McGill Physics Hackathon Creation of a generative artworks using random walks and weather data as (https://github.com/soudk/PyDinsky/tree/main/src)	<b>2020</b> s seed.
	Member of the McGill Visual Arts Society The McGill Visual Arts Society organizes art-themed events and workshops.	· Now

SURA - Dixie Park Science Undergraduate Research Award

### Crater Sketching Workshop

AWARDS AND

2019

2021

Crater sketching workshops given in partnership with the RASC (Royal Astronomical Society of Canada)

# John Abbott College Space Club August 2018 - May 2019 (Vice-President) Organization of weekly meetings and construction of a telescope.

## Music recording and composition

2015 - now

Recording and composition of soundtracks and of studio albums.

Many Travels More than 40 countries, including a year-long trip around the world (2013-2014). I completed my second year of High-School autonomously.

DISCOGRAPHY	"The Sunset Experiment" (as Chris Mauden) Music EP, composed, recorded, produced, mixed, mastered and published	2020
	"T.H.E.C.O.R.O.N.A" (as Chris Mauden) Music EP, composed, recorded, produced, mixed, mastered and published	2020
	"Differential" (as Chris Mauden) Music Album, composed, recorded, produced, mixed, mastered and published	2019
FILMOGRAPHY	"Just A Kid" (Short Documentary) Original Music Composer	2021
	"Bloom" (Short) Original Music Composer	2020
	"Philippe" (Short Documentary) Original Music Composer	2018
	"ShadowChasers 2017: The Great American Total Solar Eclipse" Original Music Composer	2018