

JENNINGS ZHANG

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EDUCATION

Northeastern University Boston, MA
COMPUTER SCIENCE/BIOLOGY COMBINED MAJOR *2019–Present*

- Expected graduation: April 2022
- Coursework: Organic Chemistry with lab, Biology Project Lab, Biostatistics, Algorithms and Data, Database Design

McGill University Montréal, QC
SCHOOL OF CONTINUING STUDIES *Fall 2018*

- Study abroad as a first semester exchange student.

COMPUTATIONAL BIOLOGY

Advanced Drug Delivery Research Laboratory (Bioengineering) Boston, MA
NORTHEASTERN UNIVERSITY *January 2020–Present*

- Achieved funding from Northeastern University's PEAK creative research project awards (\$500).
- Performed metagenomic profiling on 16S rRNA sequencing data to predict bacterial metabolites.

Fetal-Neonatal Neuroimaging Developmental Science Center (Neuroinformatics) Boston, MA
BOSTON CHILDREN'S HOSPITAL *Summer 2019, January 2020–Present*

- Developed and deployed infrastructure for sharing of containerized software on Mass Open Cloud.
- Created tools in Python, Perl, and Bash for quantitative pediatric neuroanatomical imaging studies.
- Met weekly with senior researchers to discuss mathematical challenges in medical informatics.

McGill Centre for Integrative Neuroscience (Neuroinformatics) Montréal, QC
MONTRÉAL NEUROLOGICAL INSTITUTE *Fall 2018*

- Upgraded an image processing pipeline in Perl for semi-automatic analysis of fetal neuroimaging data.

PROJECTS

Generate *Fall 2019*
BUILD STUDIO ENGINEER

- Worked alongside mechanical and electrical engineers on prototype development for an IOT cable lock using Arduino.
- Designed and implemented a proprietary messaging protocol for one-time authentication over Bluetooth LE.

Neptun/Splash *Fall 2019*

- Piloted two classes teaching high school students about clinical microbiology and computer hacking.
- Lessons featured hands-on activities involving GFP-transformed *E. coli* plates and live pen-testing on real hardware.

SearchNEU <https://searchneu.com> *Spring 2019*

- Contributor to a popular community-driven node.js/JavaScript web app at Northeastern University.
- Reverse-engineered and documented an exposed API to develop web scrapers that run 5–10 times faster than before.

HOSPITAL EXPERIENCE

Johns Hopkins Medical Institute Baltimore, MD
OUTPATIENT CLINIC *Summer 2017 & 2018*

- Recorded notes for quantitative dynamometry while shadowing during neurological examination.
- Communicated with both medical professionals and a diverse population of patients.

McGill University Health Centre Montréal, QC
MONTRÉAL GENERAL HOSPITAL *Fall 2018*

- Hospital volunteer—direct interaction with inpatients and hospital staff while delivering gratuitous coffee.

TECHNICAL SKILLS

GNU/Linux System administration and troubleshooting on Arch Linux, Ubuntu, and Fedora.
Programming ES6 JavaScript (Vue, Preact, webpack), Java, Python, Bash, Docker, SQL, CCNA