

Thibaud Roy

B.S IN COMPUTER SCIENCE AT MCGILL UNIVERSITY

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Education

McGill University

BACHELOR OF SCIENCE, MAJOR IN COMPUTER SCIENCE, MINOR IN STATISTICS

Quebec, Canada

May 2024

- **Coursework:** Data Structures and Algorithms, Object-Oriented Programming, Cloud Computing Architecture, Functional Programming, Software Design, Linear Algebra, Database Systems, Operating Systems, Statistics, Applied Machine Learning

Work Experience

Calcium

SOFTWARE ENGINEER INTERN

New York, NY

Jun. 2022 - Aug. 2022

- Developed UX/UI skills including wireframe construction and HTML5 email/banner assistance for pharmaceutical advertising agency
- Strategized initiatives for Bristol Myers Squibb's ORENCIA product such as a machine learning clustering algorithm to better target health care practitioners' email engagement, leading to a 4% higher click through rate
- Prepared dashboards on Google Data Studios using JavaScript trackers to evaluate data-driven insights from user activity and demographics of large pharmaceutical companies' websites

Obedio

SOFTWARE DEVELOPER

New York, NY

Jun. 2021 -

- Directed data driven strategy for Obedio, a community platform startup for educating and recruiting patients suffering from neurodegenerative disease, reducing PhII and PhIII clinical trial R&D costs by up to 45%
- Pioneered and built the "support-pod" feature which allows for connecting members of a patient's care journey in a cohesive group that has messaging and post-sharing capabilities using Disciple Media's API
- Extracted data from *clinicaltrials.gov* using Python and SQL hosted on AWS to identify marginalized racial communities underrepresented by a factor of up to 1/3 in Parkinson's clinical trial patient populations

Extracurricular Activity

McGill Biodesign Team

RESEARCHER

Quebec, Canada

Sep. 2020 - May. 2021

- Researched a microbial fuel cell powered by mixotrophic algae biomass to provide a net-zero emissions energy source in collaboration with the ALGO Design team
- Led team to a top 10 placement in McGill's impact200 Bicentennial Student Sustainability Challenge with a prototype that implemented a centrifugal type process to extract biomass despite lack of lab access

Projects

Vegetation Density Analysis from LandSat 8

PYTHON

New York

Dec. 2020 - Jan. 2021

- Built a high ease-of-use repository connected to EarthEngine's API that allows for vegetation density analysis anywhere in the world from satellite imagery using NDVI, SAVI, and EVI indices
- Analyzed the impact of climate change, forest fires, and urban development on Alberta, Canada identifying that the area's vegetation health has decreased by .7% year-on-year in the past 20 years

Portfolio Optimization Algorithm

PYTHON

New York

Dec. 2019 - Jan. 2020

- Implemented optimal Iron Condor options trading strategy with back-propagation of historical stock market data using Alpaca's API, resulting in 1.3% higher alpha during low-volatility periods

Skills/Interests

Programming

Other Software/Tools

Languages

Interests

Python (Pandas/NumPy), JAVA, HTML/CSS, JavaScript, Node.js, C, SQL, Apache, OCaml
Bash, Git, Excel, AWS, Catapult, Adobe XD, Google Data Studio
English, French
Surfing, Canoe-Camping, Traveling