

WORK EXPERIENCE

Software Engineer · Biddify.io

Mar 2024 - Present

- Engineered critical features for Biddify's NextJS pilot product using Prisma and Supabase, reducing auction management overhead by 97.5%
- Automated auction publishing workflows with Mergent, including report generation via react-pdf and invoice dispatch through Nodemailer
- Designed and implemented a credentials system for account creation, login, and password reset using Next Auth and jose-jwt
- Selected cost-effective third-party software to minimize expenses and ensure long-term flexibility
- Designed and optimized mobile-friendly interfaces demonstrating a user-centric design approach

Software Engineer Intern · Thomson Reuters

Jan 2021 – Aug 2021

- Built a HTML content extraction system for use in a fake news detection pipeline by cross-referencing results from multiple Python libraries
- Extended the backend of an automated curated newsletter, informing subscribers of relevant industry trends while logging user engagement using AWS, Flask, and SparkPost

Automation Engineer Intern · Statistics Canada

Sep 2019 – Dec 2019

- Developed Python tools for a standardization of English and French metadata variables using Natural Language Toolkit to reform variables from a many-to-many relationship to a one-to-one relationship

Data Analyst Intern · Statistics Canada

Feb 2019 – Apr 2019

- Predicted manufacturing times of operations for over 400 parts using regression

PROJECTS

ArbHound

Feb 2024

Telegram Bot and Selenium + BeautifulSoup WebScraper

- Scrapes the web for profitable arbitrage opportunities and sends message notifications to 10+ connected users

Memory Games ↗

Sep 2023

React Native memory game collection

- Applies graph theory concepts to dynamically generate random paths in a maze

ytSheetMusic ↗

Mar 2023

AWS EC2+S3, React and Flask Web App to convert sheet music from YouTube URL to PDF

- Identifies and isolates regions of interest using OpenCV Contour Detection, merging results to PDF
- Prevents sheet music duplicates by calculating structural similarity index between images
- Reduced result processing time from ~1 minute to instantaneous output by caching images in AWS S3

EDUCATION

University of Waterloo

Graduated 2022

BMath, Honours Computational Mathematics with Distinction (3.7/4.0 GPA)

- Minor in Computing, Minor in Combinatorics and Optimization

SKILLS & INTERESTS

- **Technologies:** Python; JavaScript/TypeScript; NextJS; AWS; React; React Native; SQL; Git; HTML; CSS
- **Interests:** badminton; piano (classical and jazz); reading; chess; meditation; self-improvement