Nicholas Lam

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EDUCATION

Honors in Computer Science (HBsc.), Honors in Business Administration (HBA)   London, ON, Canada
Western University, Ivey Business School   September 2020 - April 2025
- **GPA**: 3.7/4.0 ; Western Scholarship of Distinction: $2500, Dean's Honor List
- **Clubs**: Vice President of Projects Portfolio Western Founders Network Club, WesternAI Project Director
- **Awards**: DeltaHacksX Hackathon Winner, MapleHacks Hackathon Winner, Business 2257 Robert G. Siskind Entrepreneurial Award (1st/250), Simplii Financial Case Competition 1st Place, Relay Financial Start-up Advisory Program 1st Place, Junior Achievement Canadian Company of the Year 1st Place and North American Company of the Year 3rd Place

TECHNICAL SKILLS

Languages: C++, C, Python, Java, TypeScript/JavaScript, SQL, HTML & CSS
Skills: pandas, NumPy, TensorFlow, SQLite, MongoDB, Flask, Socket.io, Firebase, React, Node.js, Express.js, AWS

EXPERIENCE

Labatt Brewing Company   Toronto, ON, Canada
Software Engineer Intern   May 2023 - September 2023
- Conducted and presented analysis of Procure to Pay (PTP) Freight Manual Costing Processes and suggested end-to-end automation tool to reduce manual workload for auto-costing processes by 100% and increase total accuracy
- Replaced manual data cleaning and data reporting processes for all carriers across North America with an automated data processing program from scratch, removing all human error using Python, Pandas, and Microsoft Excel, leading to a 50% reduction of manual data reporting process time (10/min per error to none) with 100% lane data costing accuracy
- Selected and led a Python workshop for the entire 60-person Business Transformation Services team, demonstrating the power of Python as a tool for automating manual processes and the implications and potential use cases for Labatt

Savi Finance   Toronto, ON, Canada
Software Engineer Intern   Jan 2023 – April 2023
- Transformed Python Lambda functions into in-house RPC endpoints, enabling the front end portion of the financial budgeting app to make financial forecasting calls directly to the API instead of relying on AWS Lambda functions
- Wrote over 1500 lines of JEST tests for each API endpoint and JSDOC to ensure code functionality and performance

Ivey Business School   London, ON, Canada
Data Science Research Assistant   May 2022 – August 2022
- Assisted Professor Christian Dippel by creating unique web-scraping algorithms to scan HTML trees in Python for North American Universities to collect faculty data collecting over 10,000 valid and standardized data points for a database

Relay Financial   London, ON, Canada
Data Analyst   May 2021 – August 2021
- Utilized Postgre-SQL on a Metabase SQL Server to query data charts and tables, creating data visualization assets to display transaction data for specified organizations and individuals used in analysis for investor presentations; a specific case was used in identifying the growth of attraction in user account creation applications from a recent partnership with Nerdwallet

PROJECTS

coTA - DeltaHacksX Winner ⊙ | *React, FastAPI, Python, WebSocket, Python-PPTX, Cohere RAG Model*
- Educational Media Platform that converts lecture material documents into short-form TikTok-like content
- Created a dual RESTful API and WebSocket backend with FastAPI to extract text from PowerPoint files, and feed them to Cohere's Retrieval Augmentation Generation (RAG) model that transforms them into summaries displayed on the front-end
- Dynamically fed data to the front-end through WebSockets reducing content generation time from 2 minutes to 15 seconds

MedNow ⊙ | *React, Node.js, Socket.io, Agora.io, Firebase*
- Online web-conferencing platform for doctors to chat with patients in a queue, aimed to decrease hospital backlog
- Built a queue system connecting patients to a server using Socket.io, and a chatbot using OpenAI GPT3 API
- Doctors authenticate with Firebase OAuth, enter private meeting room built with Agora.io API rendering video and audio

RoomFinder ⊙ | *React, Express.js, PostgreSQL, C++, Arduino*
- Created a full-stack application helping students find available study rooms in their residences
- Arduino light sensors communicate current room status with RESTful backend displaying information on React front-end
- Students can see the probability of rooms being available in the next 24 hours, as data is stored in PostgreSQL database

INTERESTS

Speed Typing, Hockey (Maple Leafs) and Basketball (Stephen Curry) fan, Work Station Setups, Chess (1400 Rapid)