THOMAS NGUYEN

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EDUCATION

University of Toronto | Bachelor of Applied Science, Computer Engineering — Class of 2021 (expected)

CGPA: 3.55
Software and Communications Engineering with a Minor in Bioengineering, Certificate in Artificial Intelligence
Dean's List, Honours Standing
President's Scholars of Excellence Scholarship Recipient ($14 000)

Coursework: Algorithms & Data Structures, Operating Systems, AI Fundamentals, Intro to Machine Learning, Databases

SKILLS

Languages

Proficient: Java, C, C++, C#, SQL, HTML, CSS, JavaScript (NodeJS, AngularJS, Typescript)
Familiar: Python, Kotlin

Tools

Salesforce.com (Apex), AWS (Cloudfront, S3, API Gateway, Cognito), Apache (Maven, Camel, Servicemix), Microsoft ASP .NET, Spring Tool Suite, Jenkins, OpenGL

EXPERIENCE

407 ETR Concession Company LTD | Agile Software Developer (Salesforce, Full Stack) — May 2019 to August 2020

Developed external web application that interfaces with Infor Enterprise Asset Management (EAM) software to manage contractor work orders. Used AngularJS front end, Apache ServiceMix ESB layer using Camel routing, Java (Spring Boot) and C# (.NET 4.5) microservices using RESTful APIs, and an SQL database of over 6 million entries. Optimized performance by over 100% when viewing over 500 work orders. Integrated with AWS (Cloudfront, S3, API Gateway, Cognito).

Developed for Salesforce.com Lightning Environment. Developed custom Lightning Web Components (LWCs) used to display customer trips featuring filtering functionality. Integrated said components with SAP database of over 1.5 million entries. Scripted Salesforce.com automated tests in a variety of environments, including Provar, Askida CT, Selenium IDE, and Telerik Test Studio.

Toronto Rehabilitation Institute – Lyndhurst Centre | Researcher & Developer — May 2018 to August 2018

Developed a coaching system for functional electrical stimulation (FES) rowing designed for patients with partial spinal cord injuries. Used Python and a National Instruments Data Acquisition Unit (NI DAQ) breakout box. Tests to determine accuracy performed using motion capture software.
Publication: bit.ly/FesRowing

PROJECTS

Simple Maps – Geographical Information System | C++ — January 2018 to May 2018

Developed a GIS to analyze spatial data of major cities featuring a UI with text prediction and auto correct. Implemented Dijkstra and A* algorithms to compute optimal travel routes up to 700% faster than time limit. Implemented greedy, random 2-opt, multithreading, simulated annealing to optimize travelling salesman solution by over 300% from initial implementation (placed 21st/110 teams).

ETR Chat – AI Chat Bot | Python — July 2019

Smart chat bot integrated with Facebook Messenger that notifies customers of the 407 ETR of account details and real time statistics such as accidents, congestion, trip capture status, and billing information. Bot would use AI to record customer's regular trips and, using live information, inform user to leave earlier or later than usual depending on live highway status and weather. Implemented using Python and Facebook Messenger API.

INTERESTS AND ACTIVITIES

Iron Dragons Dragonboat Team – Club Crew World Championship 2018 (Szeged, Hungary): 8x Gold medalist, 2x Silver medalist
Lifeguard & Lifesaving Instructor – Standard First Aid and Bronze Cross instructor
Avid NBA fan – Favourite Team: Boston Celtics, Current Favourite Player: Luka Dončić, All-Time Favourite Player: Steve Nash