Matthew Ng

(289) 923-0456 | ngmattc@gmail.com | github.com/Matt-Ng | linkedin.com/in/matt-ng

EDUCATION

University of Guelph Guelph, ON, Canada
Bachelor of Computing, Computer Science, GPA: 4.0/4.0 (90% cumulative) *September 2019 – April 2024*

TECHNICAL SKILLS

Languages: Python, C#, Go, JavaScript, C, C++, Java, HTML/CSS, Dart, SQL
Frameworks/Tools:: Node.js, React, .NET, Azure, AWS, Google Cloud, MongoDB, JUnit 4, Flask, Flutter

EXPERIENCE

Google August 2022 – October 2022
Software Developer Intern *Waterloo, ON, Canada*
- Back-end development of healthcare data processing tools in Go for the Google Cloud Platform Healthcare API team.
- Improved the efficiency and extensibility of a healthcare protobuf data extraction package through the re-factorization of code and the use of more efficient graph traversal algorithms.

Microsoft May 2022 – July 2022
Software Engineer Intern *Redmond, WA, United States*
- Back-end development of a highly requested upcoming project customization feature for the Microsoft Office Project team using C#.
- Developed and performed extensive integration testing of a .NET RESTful API that automates the storing, retrieval, and creation of custom Microsoft Project files, decreasing custom project creation times by approximately 50%.

Microsoft September 2021 – December 2021
Software Engineer Intern *Vancouver, BC, Canada*
- Back-end development of tools for a message passing mechanism that distributes operations to over 100 Azure servers across the globe using C# for the Microsoft Office Planner team.
- Architected the porting of diagnostic software for use in highly secure environments that previously required manual diagnostic intervention, increasing maintenance efficiency by more than 100%.

Distributive May 2021 – August 2021
Software Developer Intern *Kingston, ON, Canada*
- Full-stack development of software components, libraries, and documentation webpages for a new distributed cloud computing platform called the Distributed Compute Protocol using Node.js.
- Developed features and fixes that significantly improved the reliability, efficiency, and performance of the platform involving connectivity, payments, and security.

University of Guelph September 2020 – December 2020
Teaching Assistant *Guelph, ON, Canada*
- Taught concepts of discrete mathematics such as: logic, set theory, mathematical proofs, and numerical systems to a class of 285 students.

University of Guelph May 2020 – August 2020
Research Assistant *Guelph, ON, Canada*
- Worked with the School of Computer Science and Ontario Veterinary College for a research project funded by the Bill & Melinda Gates Foundation: Global Burden of Animal Disease.
- Developed an API that replaces numerous deprecated NGO agricultural data APIs and a data dashboard using Python, Flask, and Plotly Dash, aiding in securing approximately $300k in funding for the project in a funding proposal.

PROJECTS

Classic Simpsons Episode Suggester *JavaScript, Node.js, MongoDB*
- Full-stack webapp that recommends golden-era Simpsons episodes with a user rating feature.

Super Duper Compressor *C++*
- Implemented a file compressor in C++ using Huffman Coding.

AWARD & EXTRACURRICULAR

Society of Computing and Information Science April 2020 - May 2021
Vice President, Internal. *University of Guelph*

North America Champion: Public Anthropology Writing Competition November 2019
Top paper out of 2500 contestants across 22 universities in North America. *Hawaii Pacific University*