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EDUCATION

UNIVERSITY OF WATERLOO | CANDIDATE FOR BACHELOR'S OF COMPUTER SCIENCE

Expected May 2023 | Waterloo, Ontario | Cumulative GPA: 3.9

Programming Coursework: Algorithms & Data Structures, Operating Systems, Compilers, OOD / OOP, State Machines Computer Coursework: Computer Architecture, Circuits, Logic Design, Embedded Systems

EXPERIENCE

GOOGLE LLC | SOFTWARE ENGINEER - INTERN

Feb 2020 - May 2020 | Sunnyvale, CA

- Implemented Python parser to automate JSON file creation/modification
- Designed integration testing framework to extend testing capabilities to live environments
- Automated service to pull production code to testing environments, removing the need for manual testing on generic builds
- Managed tickets to streamline live deployment processes and improve system visibility for back-end developers
- Utilized internal scheduling software and Kubernetes to design and automate deployment workflows in remote environments

CIENA CORPORATION | SOFTWARE DEVELOPER (CO-OP)

May 2019 - Aug 2019 | Ottawa, ON

- Used C to enhance system reliability on complex, real-time fiber optics shelves
- Developed data-driven debug tool, improving data visibility on run-time
- Implemented several synchronization architectures to provide secure, real-time capabilities of high-level managers on embedded systems
- Leveraged Yang to automate system configuration for debugging purposes
- Generated test cases under Python framework, ensuring overall sanity of product builds.

PROJECTS

NLPY | NATURAL SPEECH PROGRAMMING LANGUAGE

- Wrote transpiler to apply natural language processing and generate code from audio clips
- Trained a deep learning model to recognize and parse natural language into nested expressions
- Implemented several scripts such as "Hello World", a sieve (Eratosthenes), and prime factorization through speech
- Designed a finite state machine to handle complex queries such as (somewhat) nested expressions

Used: Python, Wit.Al, HTTP API, Finite State Machines

DEEP FINALYST | ML AUGMENTED FINANCIAL ANALYTICS PLATFORM

- Designed and trained neural network to augment classical cash flow and DCF prediction algorithms
- Applied Flask to deploy neural network over React web app interface
- Used REST APIs to refine data requests through Goldman Sachs Marquees to gather training data

Used: Flask, Python, JS, React, Tensorflow, Keras, REST

SERVR I ONLINE SERVICE SHARING PLATFORM

- Used Java to develop full-stack on a platform to for vendors to advertise services
- Implemented persistent storage using MongoDB and SQL to store user data
- Applied sockets (TCP/UDP) to connect client and server applications, effectively bringing the platform online

Used: Java, Persistent Storage, Sockets, Networking, Databases, SQL