TEODOR ANDREI GEORGESCU

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SUMMARY

A distinguished Computer Science and Health Information Science student from the University of Victoria with a strong academic background. My proficiency in Python, Java, SQL, C, and Assembly languages coupled with a foundational understanding of hardware and electrical systems equips me with a holistic perspective on technology. Leadership qualities cultivated as a Taekwondo instructor further uniquely position me for internships in computer science or health information science.

EDUCATION

UNIVERSITY OF VICTORIA, Victoria, Canada

May 2025

Bachelor of Science (BSc), Computer Science and Health Information Science

- Current GPA is 3.85.
- \$3,000 Entry scholarship.

PROFESSIONAL EXPERIENCE

TANTALUS SYSTEM CORPS, Burnaby, Canada

September 2023 - Present

Co-op Hardware Test Engineer

- Maintained and developed Python and Bash scripts for testing.
- Executed various hardware tests and monitored performance.
- Tested performance of various RF communication modules.
- Performed fault diagnosis and component updating of PCBs.
- Analyzed data using Excel.

(MCBRIDE) OMAC MASTERS TAEKWONDO, New Westminster, Canada

May 2022 - August 2022, June 2021 - August 2021

Taekwondo instructor

Instructed various age groups, designed tailored lesson plans, and managed other instructors.

PROJECTS

OPERATING SYSTEM PROJECTS, Victoria, Canada

May 2023 - August 2023

School project

- 1. **Linux command piping (C):** Designed a program that can take up to four shell commands. Then execute commands sequentially transferring output of one command as input of the next. This program emulates piping present in Unix-systems.
- 2. **Thread synchronization (C):** Developed a concurrent program using POSIX threads to simulate the formation of an ethynyl radical (two carbons and one hydrogen atom). Synchronization challenges were addressed to ensure proper combination of threads into atoms. I implemented both a mutex and a semaphore solution.
- 3. **CPU process scheduling (C)**: Created a program simulating a multi-level feedback queue scheduler. Three queues were present with decreasing priorities and increasing time quantum from most priority to least being 2, 4 and 8 seconds respectively. The scheduler also included a mechanism to prevent indefinite wait time in lower priority queues.
- 4. Linux file system operations (C):
 - Stat: Extracted and printed information about the fie systems superblock and FAT entries.
 - Ls: Imitated the "Is" command in Unix but also showed file size and creation date.
 - Cat: Imitated the "cat" command in Unix displaying file contents to the console.

ASSEMBLY PROGRAMMING, Victoria, Canada

January 2023 - April 2023

School project

All coding was done on ATMega2560 Arduino board provided by the school for a class.

- **Project 1**: Developed functions in assembly language to control LEDs on the Arduino board. When completed, one could push strings onto the stack and illuminate corresponding LEDs for each letter in the word.
- Project 2: Implemented assembly language program for the LCD display and buttons on the Arduino board. Upon completion,
 the bottom right indicated if a button was pressed or not while bottom left displayed the last pressed button. The up and
 down buttons allowed navigation through a string while left and right buttons shifted the LCD cursor on the top row, enabling
 string reiteration at any column.

SMALL-SCALE ORACLE DATABASE APPLICATION, Victoria, Canada School project

- Developed a small-scale application with a group.
- Built functionality including tables, triggers, authorization, and authentication schemes with SQL.
- Inserted logos, banners, and created page items for various display purposes.

SENTENCE CONCORDANCE, Victoria, Canada

September 2022 - December 2022

School project

Given a text file containing sentences and exclusion words it would generate an array of sentences, each with one capitalized word. If exclusion words were found in sentences, no version with that word capitalized was created. Sentences were aligned by capitalized words at the 30th column with character limits determining the number of words printed around the capitalized word.

- Version 1 C implementation (Static): Focused on static programming techniques within the C language.
- Version 2 Python Implementation (Basic): Similar to the first version but coded in Python.
- Version 3 C implementation (Dynamic): Implemented a more memory efficient version of the project through dynamic program techniques in the C language. Specifically, I used object-oriented programming to design a dynamic 2D-array structure.
- **Version 4 Python implementation (Classes):** Enhanced the Python concordance program by using object-oriented programming techniques with classes for code reusability and modular design.

SKILLS

COMPUTER & TECHNICAL

- Programming Languages: Python, Java, SQL, C, and Assembly
- Computer Tools: Git, BASH, Microsoft Office, Slack, Minicom/Teraterm, Ubuntu
- Electrical skills: Proficiency with Multimeter, Oscilloscope, Soldering tools, and Power supplies
- Foundational understanding of electronics
- Software Development

GENERAL

- Demonstrated Leadership in Small Groups
- Good teamwork skills
- Strong Communication Skills
- Problem solving
- Quick Learner
- Open-minded
- Ability to multitask

REFERENCES

YOUNG SUH

Owner of OMAC Masters Taekwondo (12th Street Location)

Email: INFO@OMAC-TAEKWONDO.COM

Phone: 604-526-2309

JAMES SUH

Owner of McBride OMAC Masters Taekwondo (McBride Location)

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