Jayant Varma

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Career Objective and Skills

3rd year Computer Science student with strong developing and debugging skills even in concurrent software programs, artificial intelligence, especially using C and Java. Seeking a Fall internship role in software development. Technical skills include:

- **Programming Languages**: C, Java, Javascript, typescript, HTML/CSS, bash shell programming, python, Assembly (RISC-V), Verilog
- Platform: Windows, Unix, Linux, POSIX, MS-Office
- **Development Tools**: Eclipse, Maven, J-Unit, VS-Code, jQuery, Node.js, git/GitHub, Ubuntu, Cygwin, GCC-compiler, gdb debugger, Apache Math Commons, WEKA Machine Learning library, Java Swing, J-freeChart, chatGPT 3.5 api

Education and Academic Achievements -

York University

Expected 2024

May 2023 - Present

Honours, Bachelor of Science in Computer Science – Overall GPA 3.3 out of 4

Relevant Courses: Advanced data structures, Software Design (SDLC: SOLID principles, design patterns, architectures, microservices and testing), Design and analysis of algorithms, Operating systems, Computer Organization, Software tools, Advanced OOP, discrete mathematics, theory of computation, professional practices in computing, web and app development.

Academic achievements include:

- York University International Scholarship of Merit 2021
- Strong academic foundation in Data structures: Recipient of EECS 2011 Learning Excellence award Fall 2022
- Strong academic foundation in Design and analysis of algorithms: Two-time recipient of EECS 3101 Learning Excellence award Winter 2023

Experience and Activities

- Software developer | YU-Hacks
 - Part time developer building Yu-Hacks hackathon website in a team of 20 student developers and an organization of 30 members
 - > Implemented functionalities including authorization, AI chatbot.
 - > Technologies learned and applied: Typescript, MongoDB, GraphSQL, React.js
- Class representative | Bethune College January 2023 March 2023
 - Organized and conducted study sessions and surveys for Math course, Applied Linear Algebra
 - Soft skills used: Public speaking, interpersonal communication, leadership.
- UNHack 2022 Hackathon | Team Leader November 2022
 - > Developed the design of an app that promotes healthy habits among students.

- > Displayed leadership, teamwork, and planning skills
- Software group in the CubeSat making club at York University, L.A.S.S.A.T | Member
 - > Helped debug code in C, python for the 'Selfie-Sat' cube-satellite.

Reading group of Math club at York University, Club Infinity | Member

Relevant Projects -

ARTIFICIALLY INTELLIGENT TEACHING ASSISTANT | PYTHON, JAVASCRIPT, HTML/CSS

April 2023-April 2023

A <u>Treasure Hacks</u> hackathon project in which the teaching assistant software does the following natural language processing tasks:

- Summarize the submitted pdf document inputted by the student (user)
- Chat with the student (user) regarding the uploaded document in a question and answers session
- Developed with use of chat GPT API in python, implemented frontend with JavaScript, HTML/CSS, node.js
- Deployed a fully functioning website using nginx. Devpost <u>link</u> Youtube <u>demo</u>

EASY-ESTATES | JAVA, MYSQL, JAVA-SWING

January 2023 - April 2023

- Developed a group project that finds most affordable (in relative terms) housing location in Canada based on Statistics Canada data on New Housing Price Index from January 1981 to December 2022.
- Implemented future prediction of pricing of the selected location's housing for the next inputted number of months using the WEKA Machine Learning library, analytical comparison of two locations using apache math commons API and is based on MVC software architecture.
- Implemented the application using MySql for storing raw data from Stats Canada, JFreeChart for visualizations/graph plotting, and Java Swing for GUI.
- Youtube <u>demo</u> ,github <u>repository</u>

SPACE INVADERS GAME | C

November 2022 - January 2023

- Developed using Posix Pthreads and semaphores for parallel implementation in C.
- Exhibits real time interaction and uses independent threads to show constant animation.

ARTIFICIALLY INTELLIGENT Tic-Tac-Toe | C

April - May 2022

- Operates in single player (versus computer) or multiplayer modes.
- Implemented future prediction of human moves by the computer program using novel greedy exhaustive search algorithm.