**Software**

Python| Java | Git | Unix | Bash Scripting | C programming | HTML | CSS | JavaScript

**Technical Skills**

* Fluency with Python including projects with Pandas, Hypothesis, and Plotly libraries
* Data analysis and practical experience with various data structures and algorithms
  + Linked lists, trees, graphs, stacks, queues, BSTs, sorting algorithms, binary search
* Ability to analyze programming efficiency using running-time analysis
* Highly proficient in formal logical thinking/problem solving in mathematics and computer science
* Excellent written and verbal communication skills
* Experience with leading a team, collaborative partnerships and working independently

**Projects**

* Personal portfolio website: <https://lakshmannair7.github.io/>
* Developed and implemented multiple efficient **AI algorithms using trees and recursion** to simulate and visually represent checkers games, involving a user-friendly interface in **Pygame**
* Designed a **Java app** to send messages between users through use of a **JMS API**
* **Constructed two AI** to play games of Adversarial Wordle “Absurdle” against one another
* Developed website from scratch using **HTML, CSS, and JavaScript** hosted with **Github**
* Exploration of **blockchain, ledgers, and cryptocurrency with linked lists**
* Designed block-based **RSA cryptosystem** & explored **RSA digital signature scheme**
* Conducted data analysis on hypertension and low-income rates in Toronto with **Plotly & Pandas**
* Designed algorithms to **traverse graphs and interconnection networks** for several topologies

**Education**

|  |
| --- |
| **University of Toronto 2022 – Present** |

* Candidate for Bachelor of Science, Computer Science Specialist

**White Oaks Secondary School 2018 – 2022**

* Accelerated Learning Program (ALP) & International Baccalaureate Program (IB)

**Extra-Curricular and Volunteering Experience**

**Oak Hacks Member & Python Contest Competitor**  **2020**

* Worked collaboratively to design a video game in Python

**DECA Competitor and Executive**  **2018 – 2022**

* Provincial Finalist Award
* Creative Writtens Competition Trainer

**Math Contests 2018 – 2022**

* Canadian Senior Math Contest, Euclid, White Oaks Team

**Debate Team 2019 – 2020**

* Upper Canada College Tournament Semi-Finalist Award

**Soccer Team 2018 – 2022**

* Player for the White Oaks Secondary School soccer team