

# Luke Sanyour

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**Objective** To obtain a challenging position where I can apply my skills and experience to make a meaningful contribution

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<b>Education</b>	<b>B.S Computer Engineering</b> Virginia Tech Machine Learning Major	Expected Graduation: May 2020 Blacksburg, Virginia
	<b>A.S Electrical Engineering</b> J Sargent Reynolds Community College Honors: Cum Laude Dean's List: Fall 2016, Spring 2017, Fall 2017, Spring 2018  <b>Cumulative GPA: 3.3/4.0</b>	Graduated May 2018 Richmond, Virginia

**Relevant Coursework** – Embedded Systems, Applied Software Design (C++), Data Structures and Algorithms (C++), Scientific Programming (C), Computer Organization and Architecture, Digital Logic, Electronics, Signals and Systems

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<b>Skills</b>	<b>Programming Languages/ HDL:</b> <ul style="list-style-type: none"><li>- Advanced: C/C++</li><li>- Intermediate: Verilog, Assembly</li><li>- Beginner: C#, Python</li></ul>	<b>Software:</b> <ul style="list-style-type: none"><li>- Linux/Unix systems</li><li>- Debugging tools including GDB, Valgrind</li><li>- Git</li><li>- Microsoft Office</li></ul>
	<b>Soft Skills:</b> <ul style="list-style-type: none"><li>- Excellent Communicator</li><li>- Quick Learner</li><li>- Team player</li><li>- Attention to detail</li></ul>	<b>Concepts:</b> <ul style="list-style-type: none"><li>- Object-Oriented Programming</li><li>- Data Structures</li><li>- Unit Testing</li><li>- Multithreaded applications</li></ul>

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## Projects and Work Experience

### Tic-Tac-Toe AI in C++

- Designed an algorithm that chooses the most optimal move in a game of tic-tac-toe
- Assigns every possible move a score based on optimality and uses a minimax approach to minimize the opponent's score
- Developed a breadth-first-search algorithm and an original implementation of a deque

### Lisp Interpreter in C++

- Wrote a medium-scale C++ implementation of an interpreter for a prefix Lisp notation-based language
- Program parses the input expression into an abstract syntax tree, evaluates, and then returns a result
- Contains five different modules that work synchronously to produce the desired output

### Function Unit in Verilog

- Wrote a function unit in Verilog to perform a variety of arithmetic and logic operations
- Function unit takes a four-bit opcode to designate one of sixteen different operations to be performed on an eight-bit operand
- Designed to minimize propagation delay and gate count

### Line Cook – The Dairy Bar

- Worked with team members to accomplish tasks in a timely manner
- Assumed leadership roles
- Trained new Employees

May 2016 – August 2018  
Richmond, Virginia