## EDUCATION

University of Maine - BS, Major: Computer Eng., Minor: Computer Science, GPA (3.0) 2021-2025

## TECHNICAL SKILLS

Programming Languages | C, C++, Python, Java, Assembly, Matlab, and Verilog

Web Development | Javascript, HTML/CSS

Developer Tools| Git, GitLab

AI development | PyTorch, Numpy, Pandas, Scipy, Sci-kit Learn,

## WORK EXPERIENCE

### **Machine Learning Research Assistant | ASCC May 2023 - Present**

*Using different AI techniques to develop software* Python | PyTorch | Numpy | Pandas | Matlab

* Translated code from Matlab into Python using Numpy, Pandas, and Matplotlib.
* Developed neural networks such as physics-informed neural networks in Python using PyTorch for a multi-fidelity deep active learning network.
* Enhanced proficiency in conducting effective meetings and consistently met project deadlines.

### **Stocking 2 Associate | Walmart July 2022 - Present**

*Leadership, teamwork, and effective communication*

* Developed basic computer skills, including proficiency in Microsoft Office and experience using inventory management software.
* Improved efficiency and productivity by suggesting and implementing process improvements in the stocking department.

## PROJECTS

### **Front-End Software Development | Portfolio May 2023 - June 2023**

*Front-end design for personal portfolio website* |Javascript | HTML/CSS | URL: [www.alexpicard.info](http://www.alexpicard.info)

* Created a personal portfolio from scratch using basic web development coding languages. The webpage includes my classes, about me, and extra projects.

**Software and Hardware Development | RISC-V Processor October 2023 - Nov 2023**

*Hardware and software development of a RISC-V processor along with verification of accuracy.* Verilog

* The project uses Quartus, Altera Cyclone V, Verilog, and block diagrams to build a simple 5-stage pipeline processor that has the implemented instructions from RISC-V. The processor has passed verification tests including, but not limited to binary search and computing the Fibonacci sequence.

**Software and Firmware Development | Pong Game October 2022 - Nov 2022**

Pong game design using software and firmware design techniques Verilog | Quartus II IDE

* A pong game was developed using some switches and a button on a Cyclone III FPGA. Firmware comes in with the programming of the switches and a button as controls, while the software development comes in when we were able to use a video out port to display the game and code simple items essential for a pong game.