

# Raymond T. Barrett

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28308 New Castle Road, Farmington Hills, MI 48331 | U.S. Citizen

## Objective

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Skilled computer programmer with a specialty for machine learning ideas and a focus on writing code that has computational cost in mind. Strengths include a drive and ambition to grow and learn. Additional experience working with many different programming languages such as MATLAB, C++, and python. Seeking an internship in the field of electrical or computer engineering for the summer of 2021.

## Education

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Georgia Institute of Technology | Atlanta, GA  
Bachelor of Science in Electrical Engineering, GPA 0.00

August 2020 to date  
Expected Graduation: May 2024

Western Reserve Academy | Hudson, OH  
Graduated *cum laude*, GPA 4.26

August 2017 - May 2020

## Skills

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<b>Programming:</b>	Java, Python, C#, JavaScript, MATLAB, C++
<b>Graphic Design:</b>	Basic image manipulation, Upscaling, Creating infographics
<b>Platforms:</b>	Linux (Ubuntu)
<b>Software:</b>	Visual Studio, Adobe, GIMP, Github, Microsoft Office, LabView
<b>Machine Learning:</b>	NVIDIA CUDA toolkit, TensorFlow
<b>Communication:</b>	Presentations, Technical Reports, Documentation
<b>Languages:</b>	English (native), Japanese (native), Spanish (beginner)

## Coursework

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Concepts in Digital System Design

- Computer system and digital design principles. Switch and gate design, Boolean algebra, number systems, arithmetic, storage elements. Datapath, memory organization, instruction set architecture, assembly language.

## Projects

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Cascade Modeling Discovery Project

September 2020 to date

Using a cascading model to predict how Covid-19 will spread throughout residence halls

- Using armadillo library in C++ to simulate a chance of an infection over nodes

Machine Learning music

April 2020

Created music by feeding a character-based recursive neural network

- Used TensorFlow and the CUDA toolkit to train a large neural network on a GPU

MathWorks Math Modeling challenge

January 2020

A 3-person team coding hackathon to solve modeling and optimization problems in 14 hours

- Created a MATLAB program to model and visualize the adoption of electric trucks

## Leadership

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Captain of cross country, ice hockey, and track teams

Summer 2019 – Spring 2020

- Was the captain of high school varsity cross country, ice hockey, and track teams

Dorm Prefect

Summer 2019 – Spring 2020

- Dorm prefect at a boarding school for the 2019-2020 school year.