

# Chris Biancone

**BS/MS Electrical  
Engineering**

☎ (973) 896-0255  
✉ [chris.biancone@gmail.com](mailto:chris.biancone@gmail.com)  
in [c-biancone](#) 🔗 [c-biancone](#)

## About

Fifth-year EE student at RIT proficient in analog and mixed signal electronics design and instruction. Experienced CAD tools such as C  dence, Altium, and MATLAB for microelectronics, control system, and SDR system design. Currently conducting research into biophysical effects of DC magnetic fields and semiconducting properties of neurons for publication in a graduate paper.

I am an Isshin-Ryu black belt and enjoy hiking and mountain biking. I have recently combined a love of music with my knowledge in analog electronics design to design a low-tolerance differential RIAA preamplifier.

## Education

### Rochester Institute of Technology

GPA: 3.7      2019 – Present  
BS/MS Electrical Engineering with  
MS focus in MEMS

## Skills

-    C  dence Virtuoso, Altium, COMSOL, SPICE, Solidworks
-    C++, Python, MATLAB, L  T  X
-    Analog / Mixed Signal Design, MEMS Fabrication

## Experience

### Control Systems Internship

Armored Vehicle Fire Control

Summers 2021 – Pres.  
Picatinny Arsenal, NJ

Managed the re-engineering of an unmanned ground vehicle electrical system to include failure modes. Investigated the adaptation of existing hardware to an open Ethernet standard. Supported the development of next-generation fire control for medium caliber systems.

### Graduate Teaching Assistant

Analog Electronics

January 2023 – Pres.  
RIT

Instructed and assisted students in RIT's EE480 Analog Electronics lab. Exercises include SPICE and hardware characterization and simulation of diode circuits, and blutistage BJT/MOSFET amplifiers.

### Undergraduate Research

Microfluidics MEMS

January 2021 – Pres.  
RIT & NSF

Developed novel process flow for manufacturing piezoresistive diaphragm array with 200 nm thickness. Packaging and testing for use to improve current microfluidic models for pumpless cooling of electronics.

## Projects

### RTR Fully-Differential Op-Amp

Verilog Harvard architecture CPU implemented in hardware on Altera FPGA. Wrote Python assembler for full development stack control.

### MSP430 Oscilloscope

Created a functional portable oscilloscope using Assembly algorithms. Uses capacitive touchpad for input and LEDs and UART for display.

### Mandelbrot Set Render

Efficiently rendered Mandelbrot Fractal in C++ with colorization and vector-mapping. Integrating with custom thread pool.