# Education

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| **The College of New Jersey (TCNJ),** Ewing, NJ | 2014 – 2019 |
| **Bachelor of Science in Electrical Engineering** | 2019 |

# Course Work

Includes: Digital Signal Processing, Embedded Systems, CS (C++ and MatLab), Computer Architecture, Advanced Engineering Math 1 & 2, Modern Physics, Electromagnetics, Communication Systems, Industrial Controls, Neural Networks, RF/Microwave Engineering, Engineering Economy & Statistics.

# Colligate Experience

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| **Senior Project – Team Lead** | 2018 |

* Successfully completed and delivered a platform to digitize a guitar signal and perform filtering before exicuting frequency & time domain analysis to track a current performance against prerecorded performance.
* Implemented the Dynamic Time Warping algorithm in C to autonomously activate or adjust guitar effect at multiple pre-designated section of performance.

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| **Delay Pedal (Team Lead)** |  |

* Designed a pre-amp circuit to offset and amplify negative voltages generated by a guitar to port them into a PSoC programmable microcontroller.
* Wrote C code to implement a Finite Impulse Response style of delay.

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| **One-Handed Keyboard (Team Lead)** |  |

* Designed a keyboard matrix schematic for disabled individuals with limited mobility.
* Wrote code to count frequency of character use in text files and to interface keyboard with computer via Arduino microprocessor.
* Received award for most innovative submission.

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| **Autonomous Fire Extinguisher** **(Team Lead)** |  |

* Managed the team, handled logistical tasks, and developed a robot that would travel a set distance independently and extinguish a candle flame.

# Skills

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| **Coding & Modeling Software:** | **Proficient**: MatLab, C++, Excel, LT–Spice & P-Spice circuit simulation, LabView, Pure Data,  **Beginner:** Java, ARMv8 Assembly, Do-More PLC, Mathematica, Verilog Hardware Description, JavaScript, HTML, JavaScript Web API, Verilog Hardware Description Language, AWR Microwave Office, AutoCAD, Projuicer C++ Library & GUI Coding Engine |
| **Documentation & Presentation** | Microsoft (Excel, Word, PowerPoint, Outlook, OneNote), Google Suite Cloud, Adobe Creative Suite, Xilinx-CORE Generator IP, |
| **Version Control:** | GitHub, GitLab |
| **Other:** | Soldering, Rudimentary Construction, Electronic Diagnosis & Repair, Multi Instrumental Performance & Recording, Logic, Reaper (DAW), FL Studio, Ableton Live, Pro-Tools, Customer Service, Sales, Public Speaking |

# Employment Experience

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| **Audio Engineering Intern, Funkadelic Studios,** New York, NY | March 2019 - Present |

* Assist in all stages of the recording & mixing process.
* Inventory, set up, maintain, and repair AV equipment.

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| **Guitar Instructor, Hoboken School of Rock,** Hoboken, NJ | February 2019 - Present |

* planning and preparing lessons in relation to individual pupils' needs..
* Producing teaching resources and coordinating their organization and distribution with management.
* Teaching theory, technique, aural skills and efficient use of practice time.

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| **STEM & Studio Director, Boys and Girls Club,** Jersey City, NJ**:** | 2018 - Present |

* Developed curriculum and instructed laboratory style science, engineering & music lessons for ages k-12.
* Overseeing the development of a School of Rock style performance and recording program using the teen tech center studio.
* Created and managed google drive to organize files, student rosters, inventory, as well as to centralize staff communication.

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| **Audio Tech,** Town of Hoboken, NJ | Summer 2018 |

* Equipment transportation and setup and troubleshooting for live music and outdoor movie showings.
* Controlled digital sound mixer & audio equipment to enable live performances & make appropriate sound adjustments.

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| **Sales Consultant,** Fair Lawn, NJ | Summer 2017 |

* Sold merchandize through electronic marketplaces & social media for customers and collected commission.
* Followed through on sales from initiation to completion and handled all customer issues and inquiries.

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| **Capitan, Biagios and The Terrace,** Paramus, NJ | Summers 2014 - 2017 |

* Worked as a server and prepared the banquet hall for events, managed orders, and handled customer requests.
* Promoted to captain and managed a group of servers, organized events, and trained new employees.

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| **Sales Associate, Vivint Home Automation & Security,** Paramus, NJ | Summer 2015 |

* Researched competition in home automation/security.
* Conducted sales pitches.
* Gathered customer referrals and managed customer accounts throughout the duration of their membership

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| **Paws Founder & CEO,** Fair Lawn, NJ | 2007-2011 |

* Established a dog walking business, organized calendars, managed employees, and acted as a liaison between customers and dog walkers.

# Certifications

* Certificate of Completion: C++ Programming A-Z: From Beginner to Advanced C++ (Udemy)
* Certificate of Completion: Analog & Digital Audio Signal Flow (Udemy)

# Extra Curriculars

* IEEE E-Board Webmaster; TCNJ Amped Recording Club; TCNJ Student United Way; TCNJAMS-Founder & President; Phi Mu Alpha Musical Fraternity; Guitar Teacher; TCNJ Robotics Club.

**Continued Education**

* (Udemy Courses - In Progress): C++ Digital Signal Processing (DSP) From Ground Up, Mastering Data Structures & Algorithms using C and C++, Electromagnetism using MATLAB & GeoGebra, PID Control with Arduino, Become a Multivariable Calculus Master, Generative Modeling - Designer Based Structural Optimization, Audio Editing with Reaper, Equalization Deconstructed, Bullet Proof Guitarists (ii): Advanced Concepts.