Nicolas Sevilla Connelly

522 Haverhill Rd, Chester, NH • nicolassevilla103@gmail.com • 603-845-7172

Motivated student-athlete open to entry-level electrical engineering positions and internship opportunities.

EDUCATION

University of New Hampshire - Durham, New Hampshire **Expected: May 2020**

Bachelor of Science- Electrical Engineering

COURSEWORK

• Electronic Design II	• Digital Systems	• Digital Signal Processing
• Signals and Systems II	• Computer Organization and Architecture	• Senior Project
• Electromagnetics I	• Computer Science II	• Fundamentals of Communication Systems
•Junior Laboratory II	• Engineering Analysis	• Control Systems

TECHNICAL SKILLS

Test Equipment	Waveform Generator, Oscilloscope, Power Supply, CNC Coordinate Measuring Machine, CNC Vision System, Height Gauge
Electrical Engineering Skills	Analog/digital circuit design, transistor circuit design, power amplifier design, DSP, control system design, signal modulation/demodulation communication systems, IC circuit design, programming in MATLAB, electromagnetic fundamentals, FPGA basics, electromechanical systems basics, signal analysis
Software Languages	Java, Python, HTML, LaTeK
Software Programs	MATLAB, Multisim, Simulink, SolidWorks, Autodesk Inventor, QVPAK, Photoshop, Sony Vegas Pro, Microsoft Office Programs (PP, Excel, Word), Texmaker
Other Technical Skills	PC building, soldering, basic CNC machining, machine shop part inspecting

PROJECTS

Cascaded Four Stage Audio Amplifier

• Designed, simulated and built a functioning four-stage audio amplifier to input an inaudible music signal to output an audible one.
• Utilized JFET, BJT, and Darlington pair transistors to create stages.
• Design included JFET high impedance input stage, two common emitter BJT stages, and a class A/B output stage.

Closed Loop Indoor Crop Environment Controller (In-Progress)

• Currently designing a closed-loop controller to take input from temperature, humidity, water sensors to actively regulate indoor grow environment for optimal growth, yield, and resource efficiency.
• FPGA also responsible for light cycle timing depending on growth stage and plant needs.
• Design will be fitted on small scale, single plant environment for home use but can be upscaled for large indoor farming facilities.

WORK EXPERIENCE

Manufacturing/Machining Intern: Stone Machine- Chester, NH **Summer 2019**

• Assisted manufacturing engineers to complete daily tasks involving the manufacturing process of machined parts.
• Perform quality assurance operations by completing part inspections and documentation.
• Managed and updated inventory system to match accurate part quantity, revision and inventory bin placement.
•Assisted in post-production operations that include sand finishing, part wash, deburring and other finishing operations.

Repair Crew: UNH Housing- Durham, NH **Summer 2018**

• Repaired and maintained college dormitory furniture and housing features using a variety of tools.
• Worked in teams to determine and assess the most cost/time efficient repair procedure.

Farm Hand: Field to Fork Farm- Chester, NH **2007- 2016**

• Worked on family farm by utilizing agricultural techniques to raise and maintain animals and crops.
• Maintained livestock, implemented basic farm construction, landscaped farm property and operated small/medium machinery.
• Assisted in customer relationships and sales.