## Collin T. Nelson

ctnn2000@gmail.com | 571.242.4706 | www.linkedin.com/in/collin-nelson | ADD PORTFOLIO

#### **SUMMARY**

Practical third-year mechanical engineering student with robotics, additive manufacturing, and traditional manufacturing experience. Passionate about engineering with several large individual and group projects completed, including designing and building a large format desktop 3D printer and over 1000 hours designing and fabricating competition robots for the FIRST Robotics Competition.

#### **EDUCATION**

#### North Carolina State University, Raleigh, NC

BS Mechanical Engineering

GPA: 4.0/4.0

Graduation: May 2022

Relevant Coursework: Engineering Solid Mechanics, Engineering Thermodynamics, Engineering Fluid Mechanics, Engineering Dynamics of Machines

**TECHNICAL SKILLS:** Solidworks, Matlab, Autodesk Inventor, Fusion 360, CNC machining, 3D Printing, Robotics, Prototyping, Debugging, Engineering Design Process, Intermediate Java, Basic Python

#### **EXPERIENCE**

#### **Undergraduate Researcher, Center for Additive Manufacturing and Logistics**

October 2019 - Present

• Operate Haas CNC to finish 3D printed copper, stainless steel, and titanium parts and make aluminum and steel machine components and fixtures, including a batch of 300 printed tensile and conductivity samples

### Sortation Associate, Amazon Logistics, Sterling, VA

June - August 2019

Sorted Amazon packages in a fast-paced environment, consistently achieving high sort rate and sort quality
 Ecological Personal Rapid Transit
 October 2018 - June 2019

• Part of a team fabricating autonomous, electric personal rapid transit vehicles for a startup on campus

#### **PROJECTS**

## Robot in Three Days, FIRST Alumni Association

December-January 2019, 2020

• Part of a team that planned and executed a three-day robot build to share our knowledge and experience with high school teams competing to solve the same challenge in six weeks

#### **Engineering Application Club**

October 2019 - May 2020

• Designing an industrial CNC as part of an interdisciplinary team

## **ASME Innovative Additive Manufacturing 3D Challenge**

September 2019 - March 2020

• Designed and 3D printed a drone using principles of design for manufacturability to race against other collegiate teams in picking up and transporting cargo around a gated course

#### **ASME Student Design Competition**

September 2019 - March 2020

• Designed a robot, as part of a team, to build a paper tower judged for height, strength, and speed

#### **FDM 3D Printer**

April 2016 - June 2018

• Independently designed and built a 3D printer using self-taught engineering concepts, gaining experience with rapid prototyping, electronics, machining, and thermoplastics

### **LEADERSHIP**

#### Build Lead, Robot in Three Days, FIRST Alumni Association

December 2020 - February 2021

• Lead the team that analysed the challenge presented, designed a robot to efficiently address each facet of the challenge, built the robot, and iteratively improved it coordinating with off-site programmers, in three days.

# Quartermaster, Robot in Three Days, FIRST Alumni Association

October 2020 -

February 2021

• Responsible for identifying and ordering the materials and tools required ahead of the Robot in Three Days event, as well as borrowing more expensive items and tracking where everything was across multiple locations throughout the event.

#### Officer/Treasurer, FIRST Alumni Association

May 2020 - Present

• Work with other leaders to apply for grants, plan and execute fundraisers, create a budget, and track purchases, as well as working to develop more opportunities to help elementary through high school FIRST robotics teams advance their technical knowledge, skills, and outreach programs.

## **Fabrication Lead and Student Mentor, FIRST Robotics**

## Collin T. Nelson

ctnn2000@gmail.com | 571.242.4706 | www.linkedin.com/in/collin-nelson | ADD PORTFOLIO

- Led fellow students to assemble 4 competition robots in a time-constrained environment
- Taught and mentored younger students as they developed technical skills and knowledge

# **Eagle Scout Service Project**

February - September, 2017

• Planned, organized, and executed the fundraising for and construction of a 100-square-foot, \$2200 outbuilding for my high school's football concessions

NOTES:
Header
Summary 2-4 sentences, highlights biggest achievements, mentions profession, 1-2 top skills
Summarize career background, include specific numbers and data
Mention:
Your experience summary ("e.g. Facebook marketer with 5+ years of experience with")
Your general experience (e.g. "Experienced in managing 10+ Facebook ad accounts")
Your top achievement (e.g "Managed over 00,000 in marketing budget over several accounts")
Achievements more important than responsibilities, add numeric measurements
Make sure what I can do for the company I'm applying to is included here
Craft this straight from the job requirements every time
The summary should be 50 words or less and should highlight the main experiences or qualifications relevant to the job description. Offering concrete examples of your past achievements is a popular strategy as these are more likely to entice recruiters to learn more about you.
Education
Technical Skills
Projects
Experience

**RESUME REVIEW: code 7501** 

**Honors and Organizations** 

Leadership

https://www.zipjob.com/visitors/verification/ctnn2000@gmail.com1582210725