

Ian Sullivan

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EDUCATION

University of North Carolina at Charlotte -B.S Mechanical Engineering Major-Energy Concentration (3.85 GPA) Expected Dec-2023

- Founder of Formula SAE EV at UNC-Charlotte
- Tutored classmates within the Peer Assisted Learning program
- Held mentorship programs within Mechanical Engineering program

Central Piedmont Community College - Mechanical Engineering Major (3.8 GPA) 2017-2020

- Classes included: Calculus I (Grade A), Calculus II&III (Grade B), Intro to Engineering (Grade A)
- Studied abroad: Sustainable development course in Paris, France

NASCAR Technical Institute- Graduated in top 10% of class (4.0 GPA) 2012-2013

PROJECTS

- Fabricated and built the 1:20 Scale Wind Tunnel for UNCC-Motorsport Research Lab with a 25ft test section
- Project founder and builder for Formula SAE Electric Vehicle
- Designed and built a testing rig for Lithium-ion Batteries to capture thermal data safely and accurately for battery behavior, included Arduino Mega for data logging, a fire box, and a light bulb system for an electrical load
- 2-axis Autonomous Pick and Place robot- designed to move/sort a 1" Ferrous ball
- Designed and built an Off-Grid Solar system for outdoor lighting and power inside a work shed
- Recovery and Overhaul of 2015 Bobcat T650, previously submerged in a Salt Lake
- Vertical Wind Turbine Concept, designed and blueprinted in Siemens NX
- Complete retrofit and design for alternative fuels in a 2014 Subaru Impreza WRX STI

EXPERIENCE

Cooperative/Internship Greenfield Development/Engineering, Duke Energy Sustainable Solutions , Charlotte, NC- 2023-Present

- Extensively researched proposed and new Electric Transmission Projects for Greenfield Prospecting
- Collected data and performed Statistical analysis on MISO queued projects
- Engineered a theoretical 90MW 4 Hour Stand-Alone Battery Storage site
- Organized a collaboration meeting with the Original Sunzia Developer and Duke Energy Sustainable Solutions
- Extensive research of Domestic Product and Prevailing wage

Assistant Lab Manager/Lead TA, University of North Carolina-Charlotte, Charlotte, NC- 2021-2023

- Maintain a safe learning environment and mentor students in motorsports and machining
- Create projects and teach MEGR-2299 Introduction to motorsports

Owner, Sully's Speed Shop LLC, Charlotte, NC- 2017-Present

- Maintain performance vehicles and provide engineered solutions for customization
- Provide Race Event support

Diesel Bus Tech II, Charlotte Mecklenburg Schools, Charlotte, NC- 2017-2020

- Documented inventory logs and acquisition forms for ordering parts
- Maintained a fleet of 50 School buses and performed road service as needed
- Managed critical event issues and dispatched repair calls

Lead Service Technician, L&M construction, Mooresville, NC- 2015-2017

- Maintained and repaired a fleet of 72 heavy-duty and medium-duty vehicles
- Maintained and repaired agricultural and highway maintenance equipment

Service Technician, Catawba Valley Diesel, Charlotte, NC- 6/2015-11/2015

- Serviced light duty and medium duty vehicles
- Performed service from preventive maintenance to full engine rebuilds
- Ordered parts, service bay organization, and ensured safe organized work areas.

"A" Level Technician, Capital Ford Charlotte, Charlotte, NC- 2013-6/2015

- Serviced and repaired light duty and medium duty vehicles
- Specialized in automatic transmission repair, diesel engines, and electrical/module faults
- Documented warranty claims and ordered parts

VOLUNTEER/LEADERSHIP

Founder and President of the Formula SAE Electric Vehicle team at UNC-Charlotte 5/2021-5/2023

- Provide leadership training and mentorship in fabrication, design, and manufacturing
- Raised over \$70,000 in funding for the program

SKILLS

- Problem Solver/Innovative thinking
- Fundraising and organization
- Communication/outreach
- Siemens NX CAD
- Word, Excel, PowerPoint
- Fabrication and Design
- Leadership/Team building
- CDL/forklift License
- Time Management
- Welding – TIG