

Caleb Arena

Pine Bush, NY | 845-421-2052 | carena7@gatech.edu | U.S. Citizen | <https://www.linkedin.com/in/caleb-arena/>

Education

Georgia Institute of Technology | Atlanta, Georgia

August 2021 – Present

Bachelor of Science in Mechanical Engineering

Expected Graduation: May 2025

- GPA: 3.53/4.00 – Dean's List: Fall 2021

Pine Bush High School | Pine Bush, New York

September 2017 – June 2021

Advanced Regents Diploma with Honors, Concentration in Science

- GPA: 98.8/100 – Class Rank: 7/451
- Website Portfolio: sites.google.com/pinebushschools.org/caleb-arena

Experience

CreoDent Milling Center, *Intern - Dental CAD/CAM Designer* | Newburgh, New York

November 2020 – March 2021

- Processed and prepared raw STL oral scans for further CAD design
- Prepared GCODE files and 3D printed processed 100+ patient scans and dental prosthetic prototypes
- Set up custom Windows laptops with 3D oral scanners and software for 30 dental clinics
- Familiarized with the operation of CNC Swiss milling machines

Pete's Pumps, *Plumbing Laborer* | Pine Bush, New York

July 2020 – September 2020

- Newly installed, repaired, and replaced over: 30+ well pumps & well tanks, 15+ water treatment and purification systems, 5+ boiler systems, 20+ sewer pumps, and general household plumbing
- Devised and implemented custom piping and electrical circuitry as required in residential and commercial facilities

Collier Construction, LLC, *Office Secretary and General Laborer* | Middletown, New York

December 2019 – February 2020

- Organized and filed company contracts and expenditures
- Contacted and networked with clients and subcontractors about prospective and current job bids
- Constructed and finished partition and bearing walls in 2 residential and 3 commercial buildings

Activities

Yellow Jacket Flying Club, *Private Pilot's License Student*

January 2022 – Present

- Waitlisted to begin training for a Private Pilot's License (PPL) on a Cessna 172 aircraft

Georgia Tech Motorsports, *Chassis Subsystem Member*

September 2021 – Present

- Challenged to work as a team to build a custom Formula-style competition car to compete in FSAE events
- Ideated, designed, and fabricated a quick rear car jack for use in competition

Projects

CAD Engineering Design Final Project, *Project Manager*

August 2021 – December 2021

- Led a 5-member team in the conceptual design of a monowheel transportation device for use in all-terrain scenarios
- Self-designed 5 out of 16 major parts in SolidWorks, served as senior part editor and assembly coordinator
- Authored 48-page documentation report detailing all project stages, from Problem Observation to Final CAD Delivery complete with renderings, animations, and presentation

Skills

- **Software:** SolidWorks, AutoCAD, Inventor, Fusion 360, Geomagic Studio, Revit, MATLAB, MS Office
- **Instrumentation:** CNC mill, Manual Mill, CNC lathe, Manual lathe, FDM & SLA 3D printing, TIG Welding, Water Jet, Laser Cutter, Power Tools, Hand Tools
- **Certifications:** Haas Basic Mill Operator, Polaris MSD Bronze: Polaris Orientation
- **Coursework:** CAD Engineering Design, Manufacturing Processes, Computing for Engineers, Principles and Applications of Engineering Materials
- **Programming Languages:** JavaScript, MATLAB
- **Professional Organizations:** American Society of Mechanical Engineers, Society of Manufacturing Engineers, National Society of High School Scholars, Hispanic Scholarship Fund