Eyob Ghiday

Phone: 773-396-8998 **Location:** Chicago, IL 60613
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Willing to Obtain Security Clearance and Travel

Website LinkedIn Github

SKILLS: Systems Engineering, Aerodynamics, Vibrations, Applied Math, Fluid Dynamics, Spacecraft, Material Science, Flight Mechanics, Aircraft Design, Optimization, Aerostructures, Additive Manufacturing, Agile Project Managing, CISCO Licensed CCNA, Robotics, Rockets, Aeronautics, Aerospace, Satellites, Turbulence, RhinoCAM, Solidworks, Flow Simulation, Component Analysis, System Testing, Kalman Filtering, Data Science, Machine Learning, Technical Writing, Artificial Intelligence, XFLR5, MATLAB, Simulink, STK, PINN, C++, Python, Java, Php, LaTeX, NLP, Html, JavaScript, dSpace, GitHub, SQL, Asana ,Waves, ImageJ, Path planning, Tinkercad, Teams, Slack, Notion, MS Office, Excel, Access.

EDUCATION

Masters in Mechanical and Aerospace Engineering.
Illinois Institute of Technology – Chicago, IL. **May 2023**

Bachelors in Aerospace Engineering.
Illinois Institute of Technology – Chicago, IL. **May 2022**

Minor in Artificial Intelligence.
Illinois Institute of Technology – Chicago, IL. **Oct 2021**

PROFESSIONAL WORK EXPERIENCE

Design Build Fly Chief Engineer – AIAA Chapter at Illinois Tech **Since Sep 2019**

- **DBF Lead Engineer:** As the main lead I manage all four sub-teams, coordinate effective communication, and handle all the responsibility from designing, sizing and interpreting constraints of the AIAA-DBF competition.
- **Aerodynamics Team Lead:** Analyze, design, and fabricate the main wing and tail of RC planes for the annual AIAA-DBF competition. I use various tools like XFLR5, Simulink, and Python for selecting airfoils and determining the sizing, trade studies and aerodynamic properties of the plane.
- **Manufacturing Team Lead:** I design & CNC the wing, Laser cut carbon fiber fuselage and surface controls.

Additive Manufacturing Research Internship – NSF, *Chicago, IL* **May 2021 to Sep 2021**

- Managed a team of 4 colleagues analyzing Ti-64 defects and porosity formation using ImageJ and Python.
- Published research: Laser Powder Bed Fusion of Titanium-64 Alloy, Inconel-718 and Stainless Steel. [article].
- Completed laser 3D printing, XRD Analysis, EBSD, Microscopy and published a paper on ScienceDirect.

Project Manager – Environmental Eco Solutions, *Schaumburg IL* **July 2019 to May 2020**

- Led a team of solutions architect and chain specialist to install and maintain HVAC systems, additionally complete EPA Property Rehabilitation, and oversight licensing.
- Prepare agile project plans and maintain the plans to see if the proposed model is properly utilized.

Engineering Internship – C.E. Niehoff & Co, *Evanston, IL* **May 2017 to Sep 2017**

- Coordinated all aspects of production, manufacturing methods, fabrication, and operation of car components.
- Performed electrical hardware testing for several different brushless alternators.
- Analyzed fatigue defects and vibrational damage of several machine parts.

IIT Competitive Org clubs – Chicago, IL **Fall 2020 to Present**

- **NASA RMC Rover:** Software Team, responsible for Pathfinding and Navigation system of the robot.
- **SED's Rocketry:** Avionics Team, handles Electrical circuitry and autonomy of the rocket.

LEADERSHIP & VOLUNTEER

Vice President of AIAA IIT: I oversee club networking, organize events, recruit students and manage club budget.
Teaching Assistant: Calculus *MATH-148* Illinois Institute of Technology.
Covid-19 Virus Project: Built a data chart that tracks COVID-19 cases for the state of Illinois, Dec 2019 - May 2020.
Volunteer: Tutoring college level subjects including Calc I II III, Physics I II III, DefEq, and Coding
Honors: Phi Theta Kappa Honor Society || Research Paper Publish || CCC Presidential Scholar || IIT Dean's List