

Yafiet Mihreteab

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<https://bit.ly/m/ProfileReferences>

EDUCATION

The George Washington University

Washington, DC

B.S. in Mechanical engineering, minor in physics

June 2025

Relevant course work: Electromechanical Controls, Circuit Theory, Airplane performance, Differential Equations, Fluid mechanics, Mechanical Machine design, Material Science, Manufacturing process and systems, Heat & Mass transfer, Engineering analysis I,II,III, and Modern physics.

TECHNICAL SKILLS

- **Programing languages:** Python | Matlab | Multisim | Arduino | Simulink | JavaScript | C++ .
- **Technical:** Geometric Dimensioning, Tolerancing, Dimensional engineering principles, Soldering Experience, Matlab experience, solidworks experience, and Computer Aided Design.
- **Modeling Software:** AutoCad2023, Solid Works2023, 3D printing, Onshape, computer imaging, Tinker CAD, Autodesk fusion360, Ansys Mechanical finite element analysis software(ANSYS).
- **Test equipments:** 3D- printers, Waveform generator, Oscilloscope, power supply, Differential gears, brushless DC motor, proximity sensor.

ACADEMIC PROJECTS

- Modeled 150 to 10Khz bandpass filter to isolate desired frequencies.
- Employed LED bars to monitor signal output using LM741 and LM386 amplifiers.
- Designed, analysed, and manufactured a slide hammer, vertical lift conveyor, and a 6-DOF hexapod with linear actuators.
- Modeled a naked finger prosthetics supported with cable latch mechanism to improve a hand impaired customer.
- Conducted e-bike research specialized in motor variation and analyzed specialized models such as turbo 1.1 and Bosch Active Line.
- Created and implemented electronic schematics for GWU rocket club's recovery system.
- Manufactured and assembled the payload for GWU Rocket club in the GWU machine shop.
- Leveraged Solid Works 3D CAD to design the mechanical structure of the payload.
- Administered fabrication and assembly of essential recovery system parts to ensure rocket landings.

RELEVANT EXPERIENCE

GW Information Technology Center

Washington DC, DC

Student Technical Assistant

August 2023 - Present

- Led technical support for 500+ staff across GW campuses, including cable management, computer imaging, Echo360 installation, and troubleshooting. Streamlined workflows, cutting response times by 30% and boosting staff productivity.
- Delivered technical support for improving incident management and network connection in over 30 classrooms, reducing post-set up technical issues.
- Processed and printed over 100 3D-printing requests for GW School of engineering Students.
- Performed computer imaging, software installation, and PC provisioning/decomposition for over 100 Dell computers.

HONORS AND AWARDS

- GWU Presidential Scholar awarded to the most competitive applicants.
- GWU Deans' List spring 2024.
- Volunteered at Quantum World Congress 2023.
- Professional Organizations: The American Society of Mechanical Engineers.
- Clubs: GWU robotics, and GWU Design, built and fly(DBF).