Walter Sumner Kimball

Waterford, ME 04088 | (207) 595-2790 | walter.kimball@nyu.edu | LinkedIn | Portfolio

EDUCATION

New York University, Tandon School of Engineering, Brooklyn, NY ***August 2023 - Present***
Bachelor of Science, Major: Mechanical Engineering, Minor: Aerospace
Mechanics of Materials, Dynamics, Material Science, Physics (I, II, III), Automotive Engineering
Overall GPA: 3.867/4.0 | EXP Graduation: May 2027

Oxford Hills Comprehensive High School, South Paris, ME ***September 2019 - June 2023***
High School Diploma | GPA 4.1/4.0 | Class Rank: 8

Oxford Hills Technical School, South Paris, ME ***September 2020 - June 2023***
Credits for Engineering Classes
Pre-Engineering (I, II, III) (7 Credits) | GPA 4.0/4.0

EXPERIENCE

Howell Laboratories Inc. Summer Internship, Bridgton, ME ***June 2024 – Sep 2024***
Mechanical Engineer Intern -

- Converted outdated engineering drawings into CAD models for digital assemblies and drawings, created engineering drawings for new Navy projects, and fulfilled engineering change requests from manufacturing.
- One of my largest contributions was making drawings for their 7600 Seawater Chlorinator. This involved dimensioning drawings, creating weld callouts, and making changes based on manufacturing annotations. I also fulfilled engineering change requests from the manufacturing floor, updated Epicor ERP for project management and development, which helped reduce the backlog and significantly reduced the project time of the 7600 by a month.

NYU Motorsports Vertical Integrated Project, NYU, Brooklyn, NY ***October 2023 - Present***
Baja Admin and Drivetrain Lead-

- Design and optimize the drivetrain of NYU's Baja car for SAE competition with work on CVT transmission, gearbox, differentials, and Hazardous Release of Energy (HROE) protection, as well as delegate work to drivetrain members. As an admin for the Baja team, I oversee the large-scale integration of the subsystem's designs, manage timelines and project management, facilitate workloads for leads, and present progress reports to the team and NYU advisors.
- One of my biggest undertakings is the design and integration of an eCVT transmission that uses electronic motors to drive the driving pulley on a CVT instead of a sprung weight. This greatly improves the response time and the overall output power of the drivetrain as compared to our current mechanical CVT. Attention to detail had to be given to sizing, orientation, materials, and overall FEA, as well as cost.

Kimball's Greenhouse, Waterford ME ***January 2018 - August 2023***
Facility Employee –

- Worked in the springs and summers with both customers and the facility, documenting and analyzing finances, leading to increases in growth, such as making the transition to accepting credit cards and increasing revenue.

PROJECTS

Compact Kei Truck Design ***January 2025 – May 2025***
In my Automotive Engineering course, we designed and reported on a vehicle that could be produced by an automotive manufacturer. This covered powertrain, brakes, suspension, and overall vehicle design. This calculated power, speed, and climbing performance, as well as lateral and longitudinal drive dynamics, are for our compact hybrid Kei truck.

Solarbrella ***September 2023 – December 2023***
My team's Semester Long Design Project at NYU, where we designed, developed, and presented a device that uses space on an umbrella to track the sun and orient itself to collect optimal solar energy.

Aquaponics System ***September 2020 – June 2023***
An automated and sustainable indoor aquaponic system with features including automatic water leveling, fish feeding, analyses, pH monitoring and adjusting, lighting cycles, and water changing.

Children's Book Author ***November 2022 - Present***
Author of "Alfie the Amphicar" (Publishing in progress, McSea Books), which is a story about a swimming car that is bullied for its differences and ultimately uses its unique abilities to save the people of its town.

SKILLS

Autodesk: AutoCAD, Fusion 360, Inventor | SolidWorks: CAD, PDM | Epicor: ERP | Arduino | 3D Printing | Laser Cutting | Programing: C++, Python- | Machining (Lathe, Mill, CNC) | Microsoft Office | Project Management (Smartsheet, ClickUp)

ACHIEVEMENTS

NYU Tandon Dean's List | Columbia CE2 Engineering Experience | 2022 OHTS Engineering Tech Challenge Gold | 2021 Engineering Excellence Award | 2022 Pre-Engineering Student of the Year | 2020 OSHA 10 Certification | Skills USA