

Ali Kilic

ali.u.kilic@vanderbilt.edu

Education

- **Vanderbilt University** **2017-Present**
 - B.E in Mechanical Engineering
 - Minors: Materials Science and Engineering, Math
 - Cumulative GPA: 3.59, MechE GPA: 3.75
 - Coursework: Aerospace Propulsion, Acoustics, Linear Control Theory, Modeling and Simulation of Dynamic Systems, Slotine Lectures on Nonlinear Systems

Skills

•Software Skills

Programming: Python, MATLAB, Simulink, LabVIEW, Arduino
Simulations: Abaqus, ANSYS, Iterative simulations using MATLAB
Document Preparation: Excel, Word, Powerpoint, L^AT_EX

•Design Skills

Control Systems: PID design and tuning using MATLAB, Simulink, LabVIEW, and Arduino
CAD: Autodesk Inventor, Autodesk Fusion 360, Onshape, Creo 4.0, Solidworks

•Manufacturing Skills

Laser Cutting, 3D Printing, Machining

Professional Experience

- **Vanderbilt Aerospace Design Laboratory - Payload Engineer** **October 2019 - Present**
 - Member of 7-time NASA Student Launch Initiative champion rocketry team.
 - Collaborating with other members to design and test a rocket that achieves successful mid-air deployment of a vertically landing and self-righting robotic imaging system.
 - Responsible for designing the autonomous self-righting system and the instrumentation for the parachute detachment system.
- **Vanderbilt MEDLab - Research Assistant** **January 2020 - April 2020**
 - Designed a motor-driven three-degree-of-freedom gantry to be used in data collection for a surgical robot on Autodesk Inventor.
 - Manufactured the motor mounts and the base platforms by 3D printing and laser cutting to build a prototype.
- **Vanderbilt University Hatzell Lab - Research Assistant** **July 2019 - November 2019**
 - Designed the control system for an experimentation machine that tests solid state batteries under high load conditions using LabVIEW.

Leadership

- **Vanderbilt Turkish Student Association - President** **September 2020 - Present**
 - Elected as the president of Vanderbilt Turkish Association for the 2020-2021 school year.
- **Vanderbilt Maker Club - Vice President** **August 2019 - Present**
 - Recruited 58 new members to the organization, created a new constitution and an annual plan, ran workshops on CAD and 3D Printing.