

# Cole Kieling

2512 Seabird Drive, Midlothian Va, 23112 — (804)887-0015 — [cjkieling@gmail.com](mailto:cjkieling@gmail.com) — [linkedin.com/in/cole-kieling](https://www.linkedin.com/in/cole-kieling) — [colekieling.com](http://colekieling.com)

---

## Objective

A Summer Internship in the Engineering Field

## Education

### University of Tennessee- Bachelors of Science in Aerospace Engineering

Expected Graduation Date May 2028; Current Class: Sophomore

#### Relevant Coursework:

- Thermodynamics, Fluid Mechanics, Airplane Performance, Physics E&M, Aerospace Seminar, Aerospace Professional Topics, Matrix Computations, Differential Equations I, Dynamics, Mechanics of Materials, Statics, Physics for Engineers I & II, Computer Methods for Engineering Problem Solving I & II, Calculus I, II & III, General Chemistry

## Skills

Matlab, Solidworks, Excel, Word, OpenRocket, Powerpoint, JavaScript, Arduino

## Projects

### UCAH: Undergraduate Hypersonics Design Competition- Student Space Technology Association

July 2025- Present

- **Design** an “unpowered, high lift-to-drag, hypersonic projectile for low altitude operation.” Required to fly Mach 8, sustain a minimum of 15g turn, Length <1m and diameter <0.1m

### L1 Rocket Certification- Student Space Technology Association

September 2025- Present

- **Design a Rocket** to successfully launch and recover under a parachute
- **Build** the rocket and **Test** the ejection wells
- **Result:** launched 9/27/25, achieving my L1 certification

### 10k Hybrid (Phobos) Rocket— Student Space Technology Association

August 2024- June 2025

- **Design a Hybrid Rocket** (Liquid Oxidizer and Solid Fuel) with an altitude goal of 10-15k ft
- **Prototype** the Phobos rocket in OpenRocket, SSTS, and Solidworks
- **Build** the designed rocket
- **Launch** the rocket at FAR-OUT Rocket Competition
- **Result:** Two successful flights, one to 2k ft and the competition launch to 12k

### Hovercraft— High School Senior Engineering Seminar Design Project

March 2024- May 2024

- **Design a hovercraft** using a OSB board, a plastic sheet, a leaf blower, corrugated fiberboard, and miscellaneous resources
- **Construct the hovercraft** in a manner such that it is drivable (i.e. it remains completely off the ground and moves with a person on and driving the craft)
- **Result:** Team of 4 successfully designed and built a hovercraft that demonstrated the ability to race across a gym floor and navigate obstacles

### Introduction to ECS— High School Junior Engineering Seminar Design Project

January 2023- May 2023

- **Hands-on introduction to ECS-** including Ladder Diagrams, basic control logic, control relays, limit switches, push buttons, safety interlock switches, and electrical devices such as electric motors, pneumatic valves, etc.
- **Application of knowledge** to design an ECS system to secure mechanical fasteners into all six faces of a cube using pneumatic systems, mechanical systems such as conveyor belts, electric motors, etc.

## Work Experience

### Midlothian Tennis Club -

January 2024- Present

- Managed building + worked with members and guests paperwork & Financial experience