# Abha Bhole

1 Woodfield Road • London, UK W5 1SL
+1 (607)-280-0844 • ab2792@cornell.edu • www.linkedin.com/in/abhabhole

## EDUCATION:

**Cornell University, College of Engineering,** Ithaca, NY, Expected May 2027 BS, Mechanical Engineering GPA: 3.44

**Relevant Courses:** Mechanics of Materials,System Dynamics, Introductory Fluid Mechanics, Thermodynamics, Electromagnetism, Mechanical Design

**A-levels—2023: Notting Hill and Ealing High School,** London, UK. Maths (A), Further Maths (B), Physics (B), English Language (A)

## PROJECTS/EXPERIENCE:

### Fluid Mechanics System Teardown – Lawnmower Engine (Fall 2025)

- In a team of 5 students, performed a full mechanical teardown of a lawnmower engine and characterized/analysed it using fluid mechanical tools.
- Produced a technical video explaining engine operation at a 3rd-year ME level.

### System Dynamics Teardown – Massage Gun (Fall 2025)

- In a team of 4 students, disassembled a massage gun in a lab setting to identify all parts of its operating system and characterized it using system dynamics tools, creating a model of it.
- Wrote a technical report detailing analysis of this system.

### Mechanics of Materials Design Project – Torque Wrench Redesign (Fall 2025)

- Used ANSYS to analyze stresses in an existing design of a torque wrench, and used CAD to redesign the torque wrench to better fulfil the required factor of safety and other requirements.

**Cornell University Sustainable Design,** Cornell University, Sustainable Mobility Project Team
**(Sept 2023-Present)**

- Work in a team with a professor and other graduate and undergraduate students to design a sustainable bus shelter for Ithaca's bus network.
- Design a structural module that can be connected to other identical modules to form a large structure, making for ease of manufacture and assembly, taking into account material and machining process to maximize sustainability.
- Use an interdisciplinary approach involving Architecture, Mechanical Engineering, Civil Engineering, Electrical Engineering and Systems Engineering to ensure project meets technical and user requirements.
- Connect with prospective users and stakeholders, as well as experts in the aforementioned fields to improve on design.
- Preliminary Stress Analysis on system using simulation software such as ANSYS
- Compiled a 128-page comprehensive report on all aspects of the project up to date with team members.

## SKILLS:

**CAD (Fusion 360), Python, MATLAB, Excel, ANSYS**