

# Charles Hart

Novato, CA 94947

Ithaca, NY 14850

(415) 985-5223

<https://www.linkedin.com/in/charlie-h-hart/>

chh92@cornell.edu

## OBJECTIVE

Complete B.S. in Mechanical Engineering (May 2026) with planned continuation to M.Eng. Systems Engineering (Jan - Dec 2026). Seeking a Summer 2026 internship in vehicle and transportation systems engineering.

## EDUCATION

**Cornell University**, College of Engineering, Ithaca, NY

**Expected Graduation: May 2026**

Bachelor of Science, Mechanical Engineering

Dean's List, Fall 2024, Spring 2025

**Relevant Courses:** Fluid Mechanics; System Dynamics; Mechanics of Materials; Mechanical Synthesis (Product Design); Dynamics; Statics & Mechanics of Solids; Computing Using MATLAB; Thermodynamics; Waves & Oscillations; Electromagnetism; Linear Algebra; Differential Equations, Heat Transfer; Mechatronics; Automotive Engineering; Internet of Things (work in Arduino/C++); Electric Vehicles; Uncertainty Analysis for Engineers (Statistical Data Analysis using Python)

## TECHNICAL EXPERIENCE

**Cornell Mars Rover Project Team**, Cornell University, *Drives Sub-Team Member*

**Oct 2022-Jan 2025**

- Designed and produced a lightweight wheel-hub assembly utilizing 3D-printed tires and aluminum hubs, reducing weight from previous rover iterations for annual competition
- Identified external requirements set for the rover system by competition rules and established internal parameters to ensure compatibility with other sub-systems and overall rover system
- Became familiar with material sourcing processes from external vendors for rover component fabrication.
- Modeled components and built sub-system assemblies using CAD software (Autodesk Inventor) and performed stress and failure analysis using ANSYS
- Produced detailed machine-shop drawings and manufactured components using a mill and lathe equipment

## PROFESSIONAL EXPERIENCE

**Statler Hotel's Regent Lounge**, Ithaca, NY, *Server*

**Mar 2023-Present**

- Work with a team of other servers and knowing how to continuously redistribute work evenly in a dynamically demanding environment
- Quickly memorize extensive food and beverage menus, while understanding allergens, liquor lists, and cocktail composition
- Manage multiple tasks at once in a fast-paced, highly demanding environment
- Maintain outstanding customer service while paying close attention to details and customers' needs
- Identify sales opportunities and when to recommend higher-end options based on customers' preferences

## ADDITIONAL EXPERIENCE

**Flamingo Lazeaway Club**, Santa Rosa, CA, *Server's Assistant*

**Sep 2021-Jul 2022**

## CAMPUS INVOLVEMENT

**Cornell Men's Club Alpine Ski Team**, Cornell University, *Member*

**Oct 2023-Present**

## SPECIALIZED SKILLS

**Professional:** Multitasking, Customer Service, Problem Solving, Strategic Thinking, Teamwork, Group Dynamics, Quick Learning, Organization

**Technical:** Autodesk Inventor, MATLAB, Data Analysis with Python/Excel, C++, ANSYS, Shop Machining/Drawings

**Languages:** English (Native); Spanish (Professional Working Proficiency); Italian (Elementary Proficiency)