

Kat Volkova

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Education -----

Cornell University College of Engineering, Ithaca, NY, Expected May 2027

B.S. Sibley School of Mechanical Engineering, Dyson School of Business Minor for Engineers, **Cumulative GPA: 3.76/4**

Coursework -----

Relevant Past Courses: Python Programming & Design, Intro to Machine Learning, Intro Macroeconomics & Microeconomics, Sustainable Engineering, Calculus 2 & 3, Statics & Mechanics of Solids, Electricity & Magnetism, Thermodynamics, Differential Equations, Linear Algebra, Marketing, Dynamics, Mechanical Design, Quantum Physics

Fall 2025 Coursework: Intro Wines, System Dynamics, Fluid Dynamics, Engineering Professional Skills Mentorship, Financial Accounting 1, Mechanics of Materials

Relevant Experience -----

DPR Construction, Rahway, NJ

Project Engineer Intern, *June 2025 - August 2025*

- Coordinated subcontractors and maintained Gantt charts for pull planning sessions, ensuring 100% on-time alignment with construction milestones and Primavera6 schedules
- Utilized ACCBuild and Autodesk BIM 360 to review 3D models, RFIs, and submittals for accuracy to the as-builts
- Fully categorized and listed the features of all of the HVAC and plumbing equipment based on a 60-page contract drawing and P&ID document, delineating purchasing packages to optimize mechanical completion of the building
- Led site inspections and safety walkthroughs, documenting field conditions and contributing to quality control and compliance efforts while earning the OSHA 30-hour certification

Cornell Concrete Canoe Project Team

Mold Subteam Member, *October 2023 - Present*; Mold Subteam Junior Lead, *May 2024 - May 2025*

- Managed construction timeline and delegated tasks to ensure milestones were met ahead of competition deadlines
- Trained 15+ new members in safe concrete application techniques while contributing to mold design and structural analysis to ensure durability and competition rule compliance.

Cornell Engineering Advising

Engineering Peer Advisor, *August 2024 - Present*

- Led weekly seminars introducing 20+ freshmen per year to campus resources and career development programs
- Collaborated with faculty and student services to learn and implement team leadership and communication skills

Cornell Engineering Office of Inclusive Excellence (OIE)

Academic Excellence Workshop Facilitator

Multivariable Calculus, *January 2025 - May 2025*; Statics & Mechanics of Solids, *August 2025 - Present*

- Taught 40+ students essential mathematics and engineering course concepts in weekly 2-hour-long sessions
- Implemented current research and weekly trainings on active learning techniques to improve student outcomes

Cornell Ann S. Bowers College of Computing and Information Science

Teaching Assistant for CS 1133: Introduction to Programming in Python, *August 2024 - November 2024*

Consultant for CS 1110: Introduction to Computing: A Design and Development Perspective, *January 2025 - May 2025*

- Provided 10 hours/week of course support by leading labs and holding consulting hours for students to attend
- Graded the work of 100+ students while assisting the professors with exam proctoring and management

Cornell Sibley School of Mechanical Engineering

Grader for ENGRD 2210: Thermodynamics, *August 2025 - Present*

- Graded the weekly assignments and exams of 150+ sophomore mechanical engineering and physics students, assisting the professor with running the class smoothly

Other Work & Volunteering Experiences -----

Chelsea Piers, Brooklyn, NY: Swim Instructor, *Summer 2023 & Summer 2024*

Tribeca Dental Studio, Tribeca, NY: Dental Assistant, *February 2023 - June 2023*

Skills -----

Skills: Python, Arduino IDE, HTML, Adobe Suite, Microsoft Suite, Autodesk Fusion 360, OSHA-30, First Aid, CPR+AED, MATLAB, SimuLink, SolidWorks, ANSYS, Sustainable design, Formula One, hiking, and painting