# Alexander Tschinkel

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Wayzata, MN


## Education:

### New York University

College of Arts and Science and Tandon School of Engineering — Spring 2024.
Dual Degree in Physics and Mechanical Engineering, Minors in Mathematics and Aerospace Engineering (GPA 3.33)
**Extracurricular Activities:** *Society of Physics Students:* Co-President (2023-2024), Treasurer (2022-2023), Winner of SPS National Outstanding Chapter Award (2023), *NYU Rogue Aerospace:* Avionics Team Mechanical Engineer, Winners AIAA Reusable Launch Vehicle Award

## Work Experience:

### NYU Physics Department Peer Tutoring

*Tutor* — Fall 2022-Present
Led organized peer tutoring sessions for undergraduate general physics courses. Helped teach and reinforce basic physics concepts for students.

### Oculogica

*Summer Engineering Intern* — Summer 2021
Designed structural protection for shipping of a medical device, including materials research, designing multiple prototypes in Solidworks, and building several prototypes out of polyethylene foam.

### Buck Hill Ski Racing Department

*Course Assistant* — Winter 2018-2020
Setup and removal of safety fencing, installation of timing equipment, and the management of a race course. Working in a team to ensure safe conditions for racers, and assisting injured skiers.

### Eco Finishing Company

*Maintenance Department Assistant* — Summer 2019
Assembled and disassembled equipment used for electroplating. Assisted with plumbing installations. Organized spare part inventories, and maintained ventilation systems within a factory.

## Research Experience:

### NYU Center For Soft Matter Research: Pine Lab

*Undergraduate Research Assistant* — Spring 2022-Present
Conducted research as part of the colloidal diamond project. Performed and optimized synthesis of polymer colloidal clusters. Examined adhesion properties of polystyrene micro-particles in relation to silicon wafers under different colloidal dispersion conditions. Designed and manufactured custom parts for microfluidics applications using CAD and stereolithography. **Recipient:** Dean's Undergraduate Research Fund Grant

## Skills:

**Coding:** LaTeX, Matlab, Python
**CAD:** ANSYS, Autodesk Fusion 360, Solidworks, Ultimaker Cura, Grabcad, Shapr3d, Preform
**Languages:** English (Native), German (Fluent in reading, writing, speaking), Russian (Fluent in speaking, basic reading), French (Proficient in reading, writing, speaking)