

James Kinney

31 South Main Street | Ashland, Ohio | (419)-496-5987 | kinneyjames95@gmail.com | [LinkedIn](#)

Objective

Motivated and detail-oriented **Materials Science** and Engineering student at Case Western Reserve University, concentrating in **Structural Materials**. Experienced in materials characterization, computational modeling, and laboratory research. Seeking opportunities to contribute technical expertise, problem-solving, and collaboration skills to engineering, research, or technology development projects.

Skills

- Materials Characterization: Optical microscopy, SEM (introductory), metallography
- Computational Tools: MATLAB, Python, Thermo-calc(basic), Excel
- Metallurgical Techniques: Sample prep, cutting, polishing, microstructure evaluation
- Modeling/Design Tools: Solidworks
- Laboratory Skills: Lab safety, sample handling, documentation, technical reporting
- Professional Skills: Team collaboration, continuous improvement, time management

Education

Case Western Reserve University, Cleveland, Ohio

Bachelor of Science in Materials Science and Engineering, Minor in Data Science

Expected Graduation: May 2028

Current GPA: 4.0

- Undergraduate Materials Society member, 2 semesters
- Quiz Bowl, 1 semester
- 2-time Dean's High Honor list recipient
- Relevant Coursework: Materials Properties: Composition and Structure, Chemistry of Materials, Foundations of Engineering and Programming

Ashland High School, Ashland, Ohio – Diploma with Honors

Graduation Date: June 2024, GPA: 4.0

- Valedictorian
- Governor's Merit Scholarship recipient
- 4-time Scholar Athlete Award recipient

Experience

Research Assistant

Dr. Hyeji Im lab, Case Western Reserve University

January 2025 – Present

- Researched vanadium-based high-entropy superalloys as lightweight, high-temperature materials with potential applications in high-stress environments
- Conducted metallurgical prep, optical microscopy, and SEM characterization to assess microstructural integrity and defect behavior
- Applied Thermo-Calc for predictive modeling of material performance and phase stability

Maintenance/Landscaping Laborer

Ashland County Parks District

May 2025 – August 2025

- Coordinated with team members to ensure **reliability, efficiency, and precision** in infrastructure repair—transferable to semiconductor cleanroom environments requiring strict process adherence
- Assisted with trail, bridge, and small structure upkeep in outdoor conditions—experience valuable in field-based technical roles