Alex Horvath

1375 Chapel St., New Haven, CT 06511; ajhorvath@uconn.edu; (203) 605-8693

EDUCATION

University of Connecticut *Graduate Student in Materials Science and Engineering (Ph.D.)*   May 2026

University of Wisconsin – Madison *Bachelor of Science* in Materials Science and Engineering   May 2019

Advanced Coursework in Materials Science
- Deformations of Materials : *Stress Mechanisms, Mechanical Behavior of Materials*
- Transport Phenomena : *Navier-stokes Solutions, COMSOL Simulations*
- Introduction to Computational Methods in Materials Science: *Molecular Dynamics and Monte-Carlo Simulations*
- Electrical, Optical, and Magnetic Materials : *Electronic Band Structure Diagrams, Quantitative descriptions*

Capstone/Senior Design Project(s)
- Proposal of Novel Annealing Cycles for More Efficient Spheroidizing of 1043 and 1045 Steels: *Conceptualized novel Annealing Cycles and Mechanical Tested Specimens. Presented Results to Steel Manufacturer*
- Comparison of CFRP and WE43 alloy vs Traditional Steels and other Materials for use in Vehicle Components

Zoet and Marcott Labs (Geosciences*)* – *University of Wisconsin– Madison*   09/14 – 05/19
- Designed experiments for measurement of activation energy of stress mechanisms in glacial ice. Fabricated equipment using variety of hand tools and machine shop equipment.
- Collection and processing of glacial erratic samples from the Adirondack Mountains
- Completed graduate level courses in glacial mechanics and attended graduate seminars in regional glacial geology.
- Awarded Hilldale-Holstrom Research Fellowship.

RECOGNITION

Hilldale-Holstrom Undergraduate Research Fellowship *Material Properties of Debris-Laden Ice*   05/2016

WORK EXPERIENCE

New Haven Reads Part-time Reading Tutor – *New Haven, CT*   8/21 - Present

Amazon Logistics (AMZL) Manager – *Nashua, NH*   6/20 – 01/21
- Managed staff of 48 – 65 associates to deliver over 30,000 packages daily during COVID Pandemic.
- Used excel, Amazon-designed programs, and other programs for shift analysis and reporting
- Troubleshoot computers and ZEBRA devices

PROFESSIONAL SKILLS, SOFTWARE KNOWLEDGE

MATLAB, Python, R, SQL: Data analysis, constructing graphs statistical analyses, database management

LAMMPS, HPC : Running molecular dynamics simulations on High Performance Computing Cluster

DSC, FT-IR, XRD, SEM, Sputtering Chambers: Familiarity with materials testing and fabrication equipment

Lathe, CNC Mill, Drill Press, Micrometer, Hand Tools: Experience with technician shop equipment

OTHER ACTIVITIES

UW-Madison Rowing *13th in 3rd Varsity Eight at 2014 IRA regatta*   2013 – 2014

UW-Madison Jazz Orchestra *Tenor Saxophonist*   2016 – 2019

REFERENCES

Seok-Woo Lee   Associate Prof. of Materials Science and Engineering   seok-woo.lee@uconn.edu
University of Connecticut

Dane Morgan   Harvey D. Spangler Professor of Engineering,   smarcott@wisc.edu
Materials Science and Engineering Assistant

Shaun Marcott   Associate Prof. of Geosciences (Climatology)   ddmorgan@wisc.edu
University of Wisconsin-Madison

Lucas Zoet   Assistant Prof. of Geosciences (Glaciology)   lzoet@wisc.edu
University of Wisconsin-Madison