

Andrew Voss

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Education

Tufts University, Medford, MA

Bachelor of Science in Mechanical Engineering, May 2022

GPA: 3.80

Douglas High School, Minden, NV

Honors: Valedictorian; Honors Diploma

Work Experience

Transport Phenomena Technologies, Somerville, MA, *Mechanical Engineer*, Sep 2022-Present, 40 hr/wk

- Redesigned furnace controller for heat treatment and diffusion bonding of copper and steels
- Simulated heat transfer in novel vapor chamber designs with SolidWorks Simulation
- Designed and built custom electromechanical machines for characterizing aerogel thickness and topography
- Frequently work independently as the only full-time employee at the startup
- Design, CAM, and machine custom parts for prototypes and assemblies

Massachusetts Department of Transportation, Arlington, MA, *Engineering Intern—Construction*, Jun-Aug 2021, 40 hr/wk.

- Assisted resident engineer with construction inspection duties
- Documented construction progress to verify contractor submittals and estimates
- Ensured bridge design plans were correctly followed by the contractor

Central Rock-Climbing Gym- Stoneham, Stoneham, MA, *Front Desk Staff*, Aug 2021-Jan 2022, 9hr/wk.

- Test climbers' skills to maintain an environment of safety
- Teach basic climbing skills to create an environment inclusive of different ability levels
- Work effectively with coworkers to ensure the gym operates smoothly; cleaning and maintaining facilities, selling memberships and passes, fostering an inclusive environment

Tufts University Office of Residential Life and Learning, Medford, MA, *Resident Assistant*, Aug 2019-Jan 2020, 15 hr/wk.

- Fostered a community among incoming first-year students via social and academic programming
- Resolved community and interpersonal disputes of residents
- Connected students with resources and organizations to facilitate a positive first-year experience
- Upheld community standards and assisted with the enforcement of residential life policy

Evolved by Nature, Medford, MA, *Manufacturing Intern*, Feb-May 2019, 16hr/wk.

- Assisted with the manufacturing of various products in the Silk Therapeutics division of the company
- Ensured that quality control procedures were followed and that products adhered to stated specifications
- Balanced time between two separate divisions in the company to assist with processes relating to both the skincare and liquid silk departments of the company
- Utilized chemical processes while adhering to strict laboratory safety procedures
- Analyzed chemical data to improve product quality

Caples Lake Resort, Kirkwood, CA, *Assistant Manager*, 2016- 2018, 15 hr/wk.

- Researched and implemented POS system; saved between one-thousand and two-thousand dollars a month
 - Learned to effectively use heavy machinery for daily tasks; performed maintenance and routinely serviced equipment such as small motors and simple construction projects
 - Redesigned and launched a new company website, increasing traffic 30% month over month (2022 project)
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Relevant Coursework

ME-70, Instruments and Experiments

- Designed experiments to investigate physical phenomena and collected data with LabView
- Performed data analysis with MATLAB

ME-30/31, Electromechanical Systems and Robotics

- Control theory for mechanical and electrical systems

ME-35, Introductory Robotics and Mechatronics

- Rapid prototyping of robotics projects supported with Raspberry Pi microcomputers
- Simple AI and computer vision applications

ME-193, Special Topics: Simulation for Mechanical Engineering

- Utilized COMSOL, ANSYS, Solidworks, and MATLAB to simulate various engineering problems