Hanna L. Mitamura

hannamit@bu.edu | (914) 255-4446 | linkedin.com/in/hannamitamura/

EDUCATION

Boston University   09/20 - 05/22
M.S. Mechanical Engineering, GPA 3.98
- Thermal Fluids focus: Heat Transfer, Thermodynamics, Fluid Mechanics with CFD
- Late Entrant Accelerated Program (LEAP): Merit Scholarship and Accelerated MS for students with non-traditional engineering backgrounds.

Vassar College   09/14 - 05/18
B.A. Chemistry with Honors, GPA 3.71

PROJECTS

Boston University Rocket Propulsion Group (BURPG)   09/20 - 05/22
- Spaceport America Cup, Intercollegiate Rocket Engineering Competition (IREC)
    - Airframe Team
        - Designed, modeled, and analyzed airframe structure (SolidWorks, Excel)
    - Flight Dynamics Team
        - Coordinated team of 30 engineering students in integration of model rocket's 7 subsystems + 8.8lb payload and completed assembly flight simulation to 10,000 ft altitude (OpenRocket)
- Modeling and Simulation of Micronozzle Flow
    - Conducted literature review and simulation of micro-nozzle flow for use in small spacecraft water vapor-based propulsion systems (OpenFOAM 9 and v2112, COMSOL)

CS50P Programming with Python Certificate, HarvardX   01/23
- Programmed Thermal modeling of boiled eggs using Python as project for self-paced EdX course

Personal website at hannamitamura.github.io   07/22 - present
- Portfolio of engineering work, coded in HTML/CSS, hosted on Github pages

EXPERIENCE

Teaching Assistant   06/21 - 08/21
Boston University College of Engineering - Boston, MA
- Guided 5 teams of undergraduate students through Truss Design project (MATLAB modeling)
- Held biweekly office hours for Intro to Statics accelerated summer course

Research Assistant   01/16 - 05/18
Vassar College Chemistry Department - Poughkeepsie, NY
- Researched polyanhydride synthesis using FTIR and NMR spectroscopy (ACS URS 04/18)
- Published GCMS and FTIR analysis of amber (Life: The Excitement of Biology Journal 02/18)

SKILLS

MATLAB, Python, C, HTML/CSS/Javascript, Visual Studio Code
SolidWorks, OpenFOAM (9, v2112 + Paraview), ANSYS (Workbench, Mechanical, Fluent), COMSOL
3D Computer-Aided Design CAD, Computational Fluid Dynamics CFD, Finite Element Analysis FEA
Google Workspace, Microsoft Office Suite (Word, Excel, PowerPoint, Outlook)