Tom Khuu

508-635-7468
khuu.t@northeastern.edu
51 Hemenway St, Boston, MA

Professional Experience

Desktop Metal - Burlington, MA - *Process and Material Development Engineer Coop* Jan 2022 - Sep 2022

- Designed and conducted experiments to optimize 3D printed metal part strength, density, and smoothness
- Managed characterization of materials using strength and cohesion tests, SEM/EDS, optical microscope
- Implemented optical distance sensors and test fixtures to develop novel powder spreading technique

Northeastern Civil Engineering Lab - Boston, MA - *Lab Technician* Jan 2021 - June 2022

- Consulted with Capstone groups to create parts using SolidWorks, 3D printers, and machine equipment
- Maintained lab spaces by organizing materials prior to and after course sessions
- Diagnosed and repaired faulty lab equipment to ensure operational status

Avantor Life Sciences - Devens, MA - *Cleanroom Technician* Jun 2021- Sep 2021

- Assembled 2000+ biopharmaceutical fluid handling manifolds by accurately interpreting technical drawings
- Inspected assemblies for disqualifying features and fixed unsatisfactory assemblies to meet requirements
- Maintained cleanliness of certified ISO 7 Standard cleanroom environments
- Taught lean manufacturing and cGMP while training 4 new employees

Education

Northeastern University, Boston, MA May 2024

Candidate for Bachelor of Science in Mechanical Engineering

GPA: 3.7

Honors: Dean's List

Courses: Mechanics of Materials, Fluid Mechanics, Thermodynamics, Statics, Dynamics, Probability and Statistics

Activities: Northeastern Electric Formula Racing, Aerospace NU, Intramural Soccer and Tennis

Massachusetts Academy of Math and Science, Worcester, MA May 2020

Two-year secondary magnet school at Worcester Polytechnic Institute (WPI)

Honors*:* Dean's List, National Honor Society

Academic Projects

COVID-19 Test Administering Robot - Northeastern Spring 2020

- Led a team of four to develop an autonomous device that dispenses and collects PCR sample tubes while minimizing risk of transmission in the Northeastern testing center
- Integrated an Arduino board with ultrasonic sensors, servos, DC motors, and custom hardware fabricated with AutoCAD and laser cutters

Assistive Dining Utensil - Mass Academy Spring 2019

- Consulted with Seven Hills Foundation to improve the ergonomics of a stabilizing utensil and allow a client to eat independently
- Led the engineering process by modeling the organic shape of the utensil in SolidWorks and rapid prototyping a more comfortable handle shape with 3D printers

Technical Skills and Interests

Programs*:* SolidWorks, AutoCAD, Microsoft Excel, MATLAB, Maple, C++, Python, JMP Stats, Materialize Magics

Manufacturing*:* 3D printer (metal binder jet and plastic FDM), laser cutter, mill, lathe, band saw, hand tools

Languages*:* Fluent in English, Proficient in Vietnamese and Spanish