

Chunyi (Kevin) Chu

(617) 893-3159 • chu.chuny@northeastern.edu • Boston, MA

EDUCATION

Northeastern University

Sept 2023 - Present

College of Engineering: BS in Mechanical Engineering, Mathematics Minor

Courses: | Calculus 1, 2 and 3 | Physics 1 and 2 | Differential Equations | Statics | Material Science | Thermodynamics |
| Mechanics of Materials | Dynamics | Fluid Mechanics |

Clubs: Electric Racing, Undergraduate Biotechnology Club

SKILLS

Languages: Fluent English | Fluent Mandarin | Basic Cantonese |

Computer skills: Solidworks | Minitab | Fusion 360 | Matlab | Jira | Autocad | Arduino IDE | C++ | Microsoft Suite |

EXPERIENCE

Genuity LLC | R&D Test Engineer Co-op | Sudbury, MA

June 2025 - Dec 2025

- Performed Design Verification (DV) testing on intravascular catheters, conducting mechanical and simulated-use evaluations to support global regulatory submissions (FDA, PMDA, and EU MDR) within a 95–95 confidence interval, and analyzed resulting data using Minitab to verify compliance with design specification requirements.
- Led and designed engineering studies and tests and addressed CAPAs (Corrective and Preventative Actions) directly impacting patient safety, collaborating with various cross functional teams to implement effective corrective actions.
- Designed a test method and custom fixture bringing lubricity testing in-house per ISO-10555, cutting external testing costs by \$5,000+ per round of DV testing and improving repeatability with a 35% reduction in result variation.
- Developed and implemented a new flow rate test method and custom fixture per ISO-10555 requirements for design verification, completing the V&V (Verification and Validation) process to ensure regulatory compliance and method reliability.
- Conducted 18 established test methods for Design Verification, streamlining protocols to reduce test cycle time and improve data repeatability, and trained 2 technicians to standardize test execution and data collection.
- Created a comprehensive technical presentation using CAD models and annotated visuals to illustrate catheter design and functionality, enabling new employees, co-ops, and cross-functional teams to fully understand product operation and key components.
- Developed a rotational fixture for the Keyence microscope enabling six-angle catheter imaging, enhancing visual inspection and reducing sample evaluation time by over 50%.
- Contributed to software testing and validation by reviewing and refining automated and manual test cases for angio sync and pullback distance features, ensuring conformance with design input and user requirement specifications.

Undergraduate Biotechnology Club | Vice President | Boston, MA

Jan 2025 - Present

- Founded undergraduate Biotechnology Club at Northeastern University.
- Coordinated the recruitment of over 10 new members with more than 20 members in total.
- Invited 3 guest speakers with profound backgrounds in the biotechnology industry to enhance club engagement and activities.

PROJECTS

Body Panel Fabrication, Northeastern Electric Racing

Jan 2025 – Present

- Contributed to the fabrication of aerodynamic body panels for the team's electric race car using carbon fiber and resin layup techniques.
- Performed mold prep, vacuum bagging, and composite curing to produce high-strength, lightweight panels aligned with race performance specs.
- Integrated aerodynamic panels with chassis geometry by coordinating CAD checks and tolerance alignment, ensuring structural integrity and race compliance.

Educational Toy, Northeastern University

Jan 2024 - April 2024

- Designed and 3D-printed modular toy car components using SolidWorks and Prusa Slicer, focusing on safety for kids and ease of assembly.
- Fabricated hybrid building blocks by combining wood-cut parts with custom 3D-printed components, enhancing mechanical engagement and user interaction.
- Programmed variable speed and power control in Arduino IDE, enhancing toy car functionality through PWM motor control.