

Michael Marchev

marchev.m@northeastern.edu | +1 (617) 943-6574 | Boston, MA | linkedin.com/in/michael-marchev

EDUCATION

Northeastern University, College of Engineering **Boston, MA**
Candidate for BS in Mechanical Engineering and Design May 2028

Awards & Activities: Generate - Hardware, Northeastern Electric Racing, Dean's List **GPA: 3.3**

Relevant Coursework: Thermodynamics, Statics, Materials Science, Physics 2, Chemistry, Differential Eq.

Lincoln-Sudbury High School **Sudbury, MA**
High School Diploma June 2024

Awards and Activities: Harvard Book Award, AIME Qualifier, Soccer Cap., T&F **SAT: 1570/1600, GPA: 3.7**

EXPERIENCE

Stryker (Endoscopy) **San Jose, CA**
R&D Mechanical Engineering Co-op January 2026-June 2026

- Built \$25,000 proprietary precision optical positioning fixture for experimental testing with sub-10 micron accuracy in 4 motorized and 4 manual axes with complete blackout cage
- Performed verification and validation testing, including vibration, thermal, laser intensity, and mechanical reliability using HALT chamber, standard/torsional Instrons, and one-off fixtures

Generate Product Development Studio **Boston, MA**
Mechanical Engineer - Sageware September 2025-December 2025

- Created fully automated and compact solution to reliably upcycle fabric scraps into jewelry beads
- Machined sharp steel inserts and high-temp SLA resin fixture to cut/stamp hardened fabric

Mechanical Engineer - Uplift Solutions December 2024-April 2025

- Designed + manufactured advanced walker with powered legs & seat for low-mobility individuals
- Led iterative development of FDM and SLA 3D-printed PLA/Grey Pro conduit linkages in Onshape
- Coordinated with Electrical Subteam to integrate motors, house electronics, protect battery, etc.

Richey & Clapper Inc. **Sudbury, MA**
Power Equipment Mechanic - STIHL Certified Silver Technician May 2025-August 2025

- Repaired/maintained petrol, diesel, and electric equipment: 2 & 4 stroke, transmissions, gearboxes, carburetors, belts, hydraulics, wheels/tires, custom parts modification, extensive shop tool usage

Northeastern University Center for STEM Education - Young Scholars' Program **Boston, MA**
Program Co-Coordinator June 2024-August 2024

- Managed 6-week NSF-funded university research program for 27 high school seniors
- Coordinated experiential education through field trips, guest faculty presentations, and seminars
- Tutored on professional development, college preparation, and communication/speaking skills

Research Assistant - Published in [Annals of Biomedical Engineering \(Vol. 53\)](#) June 2023-August 2023

- Researched impact mechanics and force propagation of advanced combat helmet systems
- Quantified precompression of helmet padding via experimental testing for Finite Element Analysis

LSRHS Math Team **Sudbury, MA**
Captain and Varsity Competitor September 2020-June 2024

- Ran weekly meetings of 70+ members, organized spirit events, tutored, created/hosted tryouts
- Led varsity team to 7th place state-wide MML finish + top three individual school-wide finish

VOLUNTEER EXPERIENCE

VolunTeachable.com **Boston, MA**
Co-Founder Sep 2020 – Aug 2024

- Founded global linguistic exchange program for mentorship of underprivileged children overseas
- Organized relationships with over 500 students and schools across South America, Asia, and Europe

CERTIFICATIONS + SKILLS

Certifications: CSWA, CSWA-AM, CSWA-Sustainability, STIHL Certified Silver Technician, Lean Green Belt

CAD/Manufacturing: SOLIDWORKS, Creo, Onshape, FDM + SLA + MJP 3D Printing, 3D Slicer, DFM, DFA

Skills: Product/Part Design, Engine Repair, Shop + Hand Tools, MS Office, MS Excel, C++, Python, MATLAB

Languages: English: *Native*, Bulgarian: *Fluent*, Mandarin: *Conversational*

Interests: Running, Hiking, Skiing, Audio, Violin, Piano, DJ, Soccer, Wellness, Mechanical Design, FDM