## MICHAEL ABADJIEV

36 Jensen Road, Watertown, MA, 02472 • msabadjiev@wpi.edu • 617-966-6612 • wpi.edu/~msabadjiev

#### **EDUCATION**

## Worcester Polytechnic Institute (WPI) Worcester, MA

May 2020

- Bachelor of Science in Mechanical Engineering and Robotics Engineering
  - o GPA: 3.35/4.0
  - o Dean's List: Fall 2018, Spring 2019
  - Relevant coursework: Unified Robotics I-IV, Thermofluid Applications and Design, Introduction to Controls Engineering, Engineering Experimentation, Software Engineering

#### SKILLS/CERTIFICATIONS

Computer: SolidWorks • SolidWorks PDM • SolidWorks Simulation • Fusion • AutoCAD • Matlab

Java • Python • ROS kinetic • HTML/CSS • Arduino • Github • Microsoft Office

**Tools:** 3D printer • Laser cutter • Oscilloscope • Function Generator • Lathe • Vertical Mill •

Vertical/horizontal bandsaw • Grinders • Belt sander

**Certifications:** CSWA • OSHA 10 hour General Industry

Foreign Languages: Bulgarian (bilingual) • French (fluent) • German (basic)

## PROJECTS: wpi.edu/~msabadjiev

#### **Society of Automotive Engineers (SAE)**

September 2016 - Present

- Composites team lead for bodywork design and manufacturing
- Scored 36<sup>th</sup> out of 120 overall at Formula SAE Michigan international

### **Unified Robotics I-IV | WPI Robotics Sequence**

January 2018 – December 2019

- Used industry standard tools and principles like ROS, SLAM and PID controllers
- Built customized robots for challenges like "re-fueling a nuclear reactor" or sorting with a robotic arm
- Documented detailed design and build process with preliminary an1d critical design reviews

#### **Rapid Prototyping Independent Study Project**

March 2017 - October 2017

- Modified a 3d printer to allow it to print continuously with a widely adaptable mechanical system
- Presented and documented achievements and analyzed conceptual feasibility for commercial use

#### **WORK EXPERIENCE**

#### ATech Turbine Components Auburn, MA

June 2019 - August 2019

Process Quality Improvement Engineering Intern

- Developed/improved overhaul routines for Pratt & Whitney Canada Jet Engines
- Improved efficiency by developing new tools/processes
- Analyzed part frequency and process flow data to identify bottlenecks and propose solutions

# Milara Inc. Milford, MA

June 2017 - August 2017

Mechanical Engineering Intern

- Designed a new pre-aligner test station for repeatability testing of Milara's Equipe product
- Managed incoming parts for assembly projects, sorting them by subassembly

#### **LEADERSHIP**

#### Collablab Worcester, MA

September 2016 - Present

Lab Monitor

• On campus makerspace geared toward facilitating student's personal projects

#### Society of Automotive Engineers (SAE) Worcester, MA

September 2016 - Present

Treasurer (2016-2018)

• Managed \$20,000 budget for a team of 25+ to design and build a racecar