

# Isabella Pestovski

Hard working and creative engineer with a strong interest in robotics and automation, self-starter, excels in fast paced work environments and known for creating strong working relationships.

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[www.bella.is](http://www.bella.is)

## EDUCATION

**The Cooper Union for the Advancement of Science and Art**, New York,  
— *B.E. in Mechanical Engineering, Cumulative GPA: 3.3 / 4.0*

AUGUST 2015 - MAY 2019

## EXPERIENCE

**BorgWarner**, Auburn Hills, MI — *Advanced R&D Intern*

MAY 2018 - AUGUST 2018

- Prototyped, assembled, and improved solenoids prior to mass production.
- Created and maintained engineering documentation for solenoid components.
- Used Excel VBA to create macros for automated data reporting.
- Presented end of term projects to senior management.

**Harvard University Microrobotics Lab**, Cambridge, MA — *Student Researcher*

JUNE 2017 - AUGUST 2017

- Built working prototype novel actuators for underwater autonomous robots.
- Presented end of term work to university department heads.
- Co-authored publication in IEEE Robotics and Automation Letters.

**The Cooper Union**, New York, NY — *Teaching Assistant*

JULY 2016 - AUGUST 2016

- Provided teaching assistance for digital logic design class.
- Topics include boolean algebra, timing/counting circuits, breadboarding.

## PROJECTS

**Autonomous Mobile Robot**

- Designed and built on-board sensor integration (object detection, IR tracking, ball launcher).
- Modeled robot body and frame in SolidWorks.
- Programmed robot functions using Arduino C.

**Stereo Vision Algorithm for Autonomous Robot**

- Developed camera calibration, object detection, and disparity map algorithms for stereo camera.
- Built algorithms using Python and MATLAB.

**Workplace Technology for Individuals with Cerebral Palsy (Senior Capstone)**

*Awarded 3rd place out of 21 teams in statewide competition*

- Designed and produced a device helping people with limited mobility to transport various objects.
- Modeled iterations in Autodesk Fusion360 and SolidWorks.

**Turducken Cooking Simulation**

- Conducted a transient thermal analysis using realistic material properties with ANSYS Workbench.
- Discretized turducken geometry into a mesh using Altair Hypermesh.

## SKILLS

SolidWorks  
Autodesk Inventor  
Autodesk Fusion360  
AutoCAD  
ANSYS APDL/Workbench  
Arduino  
C  
Edgecam  
Java  
MATLAB  
Microsoft Excel  
Python

Band Saw (horizontal and vertical)  
Drill Press  
Mill/Lathe  
Soldering  
Universal Testing Machine  
3D Printing  
Laser Cutting  
Molding  
Casting

## MEMBERSHIPS

**Society of Women Engineers**

President, 05/2017 - 05/2018

**American Society of Mechanical Engineers**

Member, 05/2015 - 05/2019

## PUBLICATIONS

IEEE RA-L, 2018

[https://docs.wixstatic.com/ugd/0b9a9f\\_1b0acd49b908448fbbade82ade03e3cc.pdf](https://docs.wixstatic.com/ugd/0b9a9f_1b0acd49b908448fbbade82ade03e3cc.pdf)