



# Robin Graham-Hayes



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**Olin College of Engineering**  
*B.S. Engineering: Mechatronics*  
May 2022

**Baltimore Polytechnic Institute**  
*Ingenuity Program*  
May 2017

## Skills



Laser cutting  
3D printing  
Class 3 Solder  
Shopbot CNC  
Sheet Metal  
Manual Mill  
Manual Lathe  
Adv. Woodwork



SolidWorks  
MATLAB  
Illustrator  
Python  
Arduino C++  
KiCAD  
LaTeX  
Photoshop

## Experience

### The Shop, Olin College

#### Shop Assistant

Aug '19 | Present

- Train students to use all machines and tools within the Wood Shop and Shopbot spaces
- Maintain and hold office hours to provide guidance and a quality resources within the shops

#### Shop Fellow

June '20 | Aug '20

- Developed and improved machine and work order systems to streamline shop operations
- Designed Posters, logos, and improved documentation using Adobe Illustrator, Google sheets, and Miro

### LAIR Lab, Olin College

June '19 | Aug '19

- Designed Physical Therapy equipment for children with Cerebral Palsy using SolidWorks, prototyping, and Soft Robotics

### DotBot, Olin College

Sept '19 | Nov '19

- Created a CNC Stippling robot to print on 2' by 3' art paper
- Led the mechanical design sub team using Solidworks, Rapid Prototyping, manual/CNC Machining, Arduino, Technical drawings, Circuit Design, and Logo design
- Visit [poe.olin.edu/2019/dotbot](http://poe.olin.edu/2019/dotbot) to learn more!

### Northrup Grumman

Sept '15 | May '17

- Created automated volumetric sorting machine using NX, Arduino, and prototyping skills
- Designed and built robotic mechanism to jump a meter
- Presented engineering projects to NGC executives

### RPK Lab, Johns Hopkins

May '15 | Aug '16

- Created and tested a magnetic linear encoder for a modular self-replicating robot using Arduino, SolidWorks, rapid fabrication
- Created a modular color tracking robot using three-wheel omnidrive, OpenCV, arduino to demonstrate autonomous decisions

## Leadership

### Resident Resource, Olin College of Engineering '18 | Present

- Resource for all students, Emotional / Cultural support, Basic emergency response

### Shop Rep., Olin College Machine Shop

'20 | Present

- Lead the Woodshop/Shopbot team
- Communicate student needs with shop staff

### Class of 2022 Rep., Council of Olin Reps.

Sept '18 | May '19

### Eagle Scout, BSA

Jan '10 | Aug '18