

# Evan Bosia

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Computer science graduate student with three years of hands-on experience solving hardware and software problems in an R&D setting.

## SKILLS

Languages: Python, Java, C++, C#, C, Go

Software: Git, Linux, Jupyter, SolidWorks, Onshape, ImageJ, ROS

Engineering: robotics, embedded, sensors, machine vision, Arduino, Raspberry Pi, 3D printing, CNC mill

## EXPERIENCE

### R&D Mechanical Engineer - Formulatrix

2017 - 2020

Responsible for R&D and support of hardware and software of the dPCR branch of Formulatrix, including the transition of the Constellation dPCR system to Qiagen.

- Managed ten active customers as the lead support engineer for the Constellation instrument
- Developed and implemented automation to increase the production limiting step rate by 500%
  - Thousands of plates of different sizes and types have been processed using the tool
- Created an algorithm to dynamically measure thousands of fluorescent particles in an image
- Wrote dust detection script to remove human-bias from microplate QC
- Automated image scoring to quantify and objectively compare dPCR randomness quality

## PROJECTS

### Drawbot

- Designed and built CNC robot that draws pictures
- Developed path generation code including self made geometry library in C++
- Set up Flask server to allow network connection to the drawbot

### BU Projects

- Implemented RAFT distributed state machine in go
- Wrote text-based RPG game in Java using object oriented design

## EDUCATION

### Boston University

2020 - current

### Master of Science (B.S.) in Computer Science

### Worcester Polytechnic Institute

2013 - 2017

### Bachelor of Science (B.S.) in Robotics Engineering and Mechanical Engineering

GPA 3.75/4.0

Rho Beta Epsilon (Robotics) Honor Society

Tau Beta Pi (Engineering) Honor Society