# Education

|  |
| --- |
| May 2019Engineering Sciences (B.S.), Harvard university **Track**: Bioengineering. **Subtrack**: Mechanical Engineering. **Minor**: Computer Science **GPA**: 3.12  **Extracurricular:** Harvard Undergraduate Robotics Team, Harvard BioRobotics Lab Research Assistant, Quincy Building Manager’s Assistant, Sanders Theatre Production Assistant, Widener Library Circulation Assistant  **Thesis** (in progress): Designed a skeletal immobilization device that provides soft tissue protection to aid rehabilitation of open fracture wounds. |

# Experience

|  |
| --- |
| September 2018 – presentHardware development Intern, loro co. Loro is an assistive technology startup at the Harvard iLab that works to create a smart companion for wheelchair users with additional features such as a 360 camera, laser pointer, flashlight, and text to speech capabilities.   * Resolved firmware issues associated with the Arduino (proMicro) and Javascript application * Designed a modular shell using SolidWorks that allows the team to make modifications on the go  May 2018 – august 2018Engineering Intern, Diba Industries  * Developed and designed innovative test protocols to characterize physical, functional, chemical, and mechanical performance of various medical fluidic systems. * Statistically analyzed test results and prepared technical and sales test reports to be distributed to clients * Collaborated effectively with various departments such as applications engineering, manufacture engineering, quality assurance, sales, and purchasing. * Prepared and presented oral and written project reports and discussions with the senior board of directors |

# Skills

|  |
| --- |
| **Programming:** Java, C, Ruby on Rails, Python, JavaScript, HTML, SQL, MATLAB, Mathematica, OCaml **Mechanical:** CNC programming, mill, lathe, injection mold, horizontal/vertical band saw, drill press,  microfluidics, laser cutting, 3D printing, GD&T  **Software**: COMSOL, SolidWorks, ImageJ |

# Projects (For additional projects, please Request portfolio)

**Chem-E-Car** – Fall ’17 to Spring ’18

Designed using SolidWorks, and analyzed using COMSOL, a chemically powered car for the Chem-E-Car competition. An aluminum-air reaction was used to power a thermoelectric generator. The braking system was developed through an Arduino using a light sensor that counted iterations in color-changes in a modified Briggs-Rauscher reaction. All parts were created using Makerbot and Ultimaker 3D printers, laser-cut acrylic, and custom machined parts.

**Turf War Bot** – Spring ’18

Designed using SolidWorks, a wheeled robot in that moves up and down ramps in a competition field with the goal to move different sized rubber balls across a partition. It was created using parts made from 3D printers, laser cutters, CNC mills, lathes, drills, and silicon molds.