

## Related Experience

### Research and Development Engineer

Geometric Biomedical Computing Group | Apr '17 - Sept '17

Developed algorithms and software using MATLAB and python in order to solve geometry-related computing problems for breast cancer tissue

Constructed deep learning algorithm and classifier in order to classify pixels as lymphocytes in order to build benign/malignant classifier

Designed and build an optical spectrometer using an Arduino to automatically calibrate computer monitor intensity

Installed and maintained multiple Linux OS as well as interfaced with high performance computing cluster

Interfaced with veteran pathologist to solidify biological information

### Application Engineer

IFM Efector | Sept '15 - Mar '16

Consulted via email, phone, and face-to-face for customers on automation of manufacturing processes using IFM's electronic sensors, cameras, and industrial networking devices

Developed and designed hands-on electronic devices for use in employee training, specifically for optical and flow sensors

Conducted extensive periods of in-depth technical evaluation of customer's processes and systems

## Additional Experience

### Intramural Supervisor

Drexel University | Sept '15 - Apr '17

Lead staff and participants during intramural sport play

Act as key respondent and coordinator during any and all emergency situations

### Drexel Co-founder/Vice President

Caleb's Foundation: Pennies from Heaven | Oct '14 - Aug '16

Reached out to companies asking for sponsorship for the annual blind auction

Supported charity headquarters by assisting in running annual auction.

## Education

### Drexel University

Bachelor of Science in Computer Engineering

Philadelphia, PA

Sept '14-June '19

### Shanghai Jiao Tong University

Author on research paper of patent invention for corona aided catalytic converter

Shanghai, China

Sept '17-Jan '18

## Computer Language Skills

MATLAB



C++



Python



Assembly



Bash



HTML



## Other Skills

Spanish, Solidworks, Creo Parametric, AutoCAD, Google SketchUp, Microsoft Office, 3D printing, Arduino, LabVIEW, Multisim, HTML5, VHDL, Linux, Mac, Windows

## Design Projects

### Website Designer

[www.pages.drexel.edu/~dbj27/](http://www.pages.drexel.edu/~dbj27/) | Sept '17 - Nov '17

Designed, developed, and maintained my personal website using HTML

Self-taught HTML to create website

### Team member

MIPS computer design | Oct '17 - Nov '17

Modeled both single cycle and pipelined implementation of MIPS computer in Verilog that supported a subset of MIPS instruction set

Simulated and modeled in Verilog HDL and synthesized by using Xilinx FPGA synthesis tool

### Captain, liaison, programmer

Student Design Competition | Sept '14 - Mar '15

Designed autonomous robot to retrieve simulated nuclear waste with greater speed and efficiency than competing robots

Programmed robot with minimal number of commands to enable more precision and accuracy of movement