

# Benjamin Lawrence

<http://benjaminclawrence.com> | 214-558-7585 | [benjamin.lawrence@duke.edu](mailto:benjamin.lawrence@duke.edu)

---

## GOALS

Steve Jobs said, “Those who are crazy enough to think they can change the world are the ones that do.” I am crazy enough to think I will change the world. By the time I die, I intend for the world to have been fundamentally changed by my time here.

## EDUCATION

Duke University class of 2020

Triple Major: Bachelor of Science in Electrical and Computer Engineering, Bachelor of Science in Mathematics, Bachelor of Science in Computer Science

- GPA: 3.738/4.00
- Relevant Coursework: Data structures and algorithms, computer architecture, operating systems, linear algebra, probability, differential equations, real analysis, topological data analysis, signals and systems, microelectronic devices and circuits, algorithms, digital systems, optics and photonics
- Honors and Awards: Dean's List, Eagle Scout

## WORK HISTORY

Duke University Bluesmith Program (06/2018- Present)

- Clients come to us with specialty designs and we turn them into finished products.
- I specifically maintain and use the ProJet MJP 3600 Series, Stratasys J750 3D Printer, Ultimaker S5, Gigabot XLT 3+ 3D printer, FormLabs Form 2 printers, and the Mcor IRIS HD paper printer. Outside of 3D printers, I use laser engravers, CNC milling machines, a water jet cutter, and the standard array of machine shop tools to create finished products.
- Clients submit jobs, I work with them on how they want their products made, quote jobs, and create the finished products to be given to the clients. I am responsible for making sure the clients are kept in the loop for the progress of their jobs and for overall client satisfaction.

Duke University DesignHub Team (06/2018- Present)

- Clients come to us with speciality problems that need solving.
- We work with them to design custom parts.
- We prototype and hash out the design and materials and then send it off to be built by the Bluesmith Team.

Duke University Innovation Co-Lab (08/2017-08/2018)

- Maintained and used around 60 Ultimaker 3D printers including the Ultimaker 2+, Ultimaker 2+ Extended, Ultimaker 3, and Ultimaker S5
- Maintained and used the Epilog Zing and Fusion laser engravers and the Trotec Speedy 400
- Maintained and used the Tormach 770 CNC milling machine and the ShopBot CNC mill
- Taught students and patrons how to 3D print, laser cut, and general machine shop etiquette
- Obtained over 1700 hours of 3D printing experience

University of Texas at Dallas Nanotech Institute (06/2015-08/2015)

- Spun threads of carbon nanotubes infused with microorganisms
- Researched the uses of these yarns as mechanical actuators in water triggered sensors

## Activities

Hack Duke

- Participated in HackDuke 2017. Our team created a “Common Application” website for student internships where students could create an account to apply to internships all in one website instead of on each individual company website

### OTHER SKILLS

Adept with Microsoft Office Suits

Computer Languages: Java, Python, C, C++, MIPS Assembly, MatLab, Verilog HDL, Arduino

Very knowledgeable with Linux, MacOS, and Windows

Certified to run the Duke Immersive Virtual Environment system (approximately \$1.2 million virtual reality system)

Familiarity with German