

Sasha Bakker

☎ (603) 3598308

✉ sbakker@umass.edu

📄 <https://github.com/sashabakker>

Education

2017–2021 **(BS) Physics and Statistics**, *University of Massachusetts, Amherst, MA*. CGPA 3.76.

2017 **Diploma**, *Mascoma Valley Regional High School, Canaan, NH*.

Coursework

Physics Quantum mechanics, Mechanics, Computational physics, Techniques of theoretical physics, Modern physics, Thermodynamics and waves, Electricity and magnetism

Mathematics Statistics, Ordinary Differential equations, Multivariate calculus, Linear algebra

Technical Skills

Programming PYTHON, L^AT_EX, GOOGLE APPS SCRIPT, AUTOHOTKEY, C, JAVA

Frameworks QISKIT

Software IGOR PRO, CAPSTONE, MICROSOFT OFFICE

Hardware ARDUINO UNO, GEIGER COUNTER, SCINTILLATION DETECTOR, INTERFEROMETER, COLLIMATOR, FRANCK-HERTZ APPARATUS, MILLIKAN OIL-DROP APPARATUS, VOLTMETER

Editing L^AT_EX, ADOBE PHOTOSHOP, IMAGEMAGICK

Collaboration UMass Amherst 2019 Conference for Undergraduate Women in Physics board member.

Work and Research Experience

January 2019–Present Researching the time dependence of a soft elastic sheet at a viscous interface. **Condensed matter physics research group**. Supervised by Prof. Narayanan Menon.

May–August 2019 **Printhead Test Lab Intern**. Designed a passive baffle for high-standoff printing applications. Executed various ink tests, analyzed and communicated the results. *Fujifilm Dimatix, Lebanon, NH*.

January–May 2019 Troubleshooted classwork and provided individualized feedback to students as an Undergraduate Teacher's Assistant for **Computational Physics (python)**. Supervised by Prof. Donald Candela.

September–December 2018 Mentored 9 freshman physics and astronomy students in solving Newtonian mechanics problems as an **Undergraduate Teacher's Assistant** for Physics I - Mechanics. Supervised by Prof. Jennifer Ross.

May–August 2018 **Printhead Test Lab Intern**. Scripted a printhead test submission system in Google Sheets. Consisely documented standard jetting performance testing procedures. *Fujifilm Dimatix, Lebanon, NH*.