

# Sasha Bakker

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📄 <https://sashabakker.github.io>

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## Education

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

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

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## Coursework

Physics Computational physics, Quantum computing, Quantum mechanics, Techniques of theoretical physics

Physics Lab Mechanics, Thermodynamics and waves, Electricity and magnetism, Modern physics

Mathematics Statistics, Regression analysis, Ordinary differential equations, Multivariate calculus, Linear algebra

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## Technical Skills

Programming Python, Google Apps Script, C, Java, AutoHotKey

Software Igor Pro, Capstone, Microsoft Office

Hardware Arduino Uno, Sensors (light, temperature, position), Geiger counter, Scintillation detector, Interferometer, Franck-Hertz Apparatus, Millikan Oil-Drop Apparatus, Voltmeter

Editing L<sup>A</sup>T<sub>E</sub>X, Adobe Photoshop, ImageMagick, ImageJ

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

Teamwork Worked with lab partners and learned mechanics in teams of 2-3 students

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## Work and Research Experience

Jan 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-Aug 2019 **Printhead Test Lab Intern.** Designed a passive baffle for high-standoff printing applications. Executed various product and print tests, analyzed and communicated the results. *Fujifilm Dimatix, Lebanon, NH.*

Jan-May 2019 Troubleshooted classwork and provided individualized feedback to students as an Undergraduate Teacher's Assistant for **Computational Physics (python)**. Held office hours outside of class. *Supervised by Prof. Donald Candela.*

Sept-Dec 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-Aug 2018 **Printhead Test Lab Intern.** Scripted a printhead test submission system in Google Sheets. Consistently documented standard jetting performance testing procedures. *Fujifilm Dimatix, Lebanon, NH.*