

Sasha Bakker

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📄 <https://sashabakker.github.io>

I am a Physics & Statistics student looking for a summer 2020 internship involving computational data analysis.

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 Computational physics, Quantum computing, Quantum mechanics, Techniques of theoretical physics
Lab and Physics Mechanics, Thermodynamics and waves, Electricity and magnetism, Modern physics
Mathematics Statistics, Regression analysis, Ordinary differential equations, Multivariate calculus, Linear algebra

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^AT_EX, 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

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 product and print 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)**. Held office hours outside of class. 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. Consistently documented standard jetting performance testing procedures. *Fujifilm Dimatix, Lebanon, NH.*