

Dear Hiring Manager,

From the beginning of my junior year until graduation (two years), I worked in a multi-disciplinary research group at UC Berkeley investigating the electrical response of biological cells traversing a microfluidics channel. My central responsibility was the design of the highly sensitive device making the impedance measurements. My workflow included designing the circuits, designing the PCBs, assembly, testing of the device, and finally, making any design adjustments for revisions.

This research has helped prepare me for this position by providing extensive experience in interpreting, designing, and maintaining schematics, as well as compiling and maintaining a comprehensive bill of materials. I find enjoyment in the meticulous organization of my designs, both for ease of use and propriety. I can provide various samples of my circuits and their respective PCB layouts. I also have some foundational experience with high voltage and electromechanical systems from my studies in the Computer/Electronics program at the Regional Career and Technical Center in Coventry, RI.

I enjoy working with electronics and as a hobby, I repair electronics from smart phones and computers to other miscellaneous consumer devices. This has played a role in providing me with some of my vast experience in troubleshooting circuits and systems. For recreation, classmates of mine would bring their broken phones and computers to me for repair at no cost.

I am very interested in this position and am available for immediate hire. I can be reached by means of phone or email and will be awaiting your review of my application.

Thank you for your time,

Jacob D. Sleczkowski

# JACOB D. SLECZKOWSKI

23 Tolpa Circle Chicopee, MA 01020

Email: jakeslec251@yahoo.com

Phone: (401) 787-6903

**OBJECTIVE** | Acquire a position for employment in the fields of physics or electrical engineering to gain valuable experience and enhance my success as a professional physicist or engineer.

**EDUCATION** | **UNIVERSITY OF MASSACHUSETTS, AMHERST**

August 2020 – August 2023

Physics graduate student, researcher, and teaching assistant. Assisted for courses such as Introduction to Physics, General Physics, and Computer Programming for Aspiring Scientists.

**UNIVERSITY OF CALIFORNIA, BERKELEY**

August 2018 – May 2020

B.A. in Physics and Minor in EECS/Computer Science. Completed courses include Electromagnetism and Optics I & II, Quantum Mechanics I & II, Analytic Mechanics, Microelectronic Devices, Designing Information Devices and Systems II, Structure and Interpretation of Computer Programs, and Machine Structures.

**ALLAN HANCOCK COLLEGE, SANTA MARIA, CA**

August 2016 – May 2018

Pursued degree in electrical engineering prior to transferring to a four-year university in Fall 2018. GPA: 4.00/4.00. Placed on Dean's List for three semesters of enrollment. Was concurrently working full-time to pay for college.

**REGIONAL CAREER AND TECHNICAL CENTER, COVENTRY, RI**

2007-2010

Participated in the computer and electronics vocational program. Curriculum included computer systems organization and management, programming C++, electronics theory, analog circuit analysis, and digital circuit design.

**EXPERIENCE** | **TEACHING ASSISTANT (T.A.) UNIVERSITY OF MASSACHUSETTS, AMHERST**

August 2020 – August 2023

Assisted with Introduction to Physics, General Physics, and Computer Programming for Aspiring Scientists courses. Instructed lab sections, facilitated help room hours, facilitated testing, and assisted at lectures.

**RESEARCHER WANG LAB UNIVERSITY OF MASSACHUSETTS, AMHERST**

September 2020 – August 2021

Assisted with lab maintenance such as taking apart and reassembling the dilution refrigerator to analyze qubits.

**RESEARCHER MIKLAB UNIVERSITY OF CALIFORNIA, BERKELEY**

October 2018 – May 2020

Designed circuits for research in data acquisition for a microfluidic sensing device including preamplification, data acquisition and device interface circuits.

**RESEARCHER MÜLLER GROUP UNIVERSITY OF CALIFORNIA, BERKELEY**

May 2018 – May 2020

Worked in the fine structure constant measurement experiment, constructed a cesium spectroscopy setup for use as an optical frequency reference. Also worked in the Mini-G experiment, replacing and reconfiguring the project's microwave frequency generator and reconfiguring the on-board microcontroller's communications network.

**COLLEGE LEVEL MATH TUTOR ALLAN HANCOCK COLLEGE**

January 2017– May 2018

Responsibilities included assisting students in the development of their critical thinking and mathematical skills. Worked with other tutors and teachers to provide students with flexible learning approaches.

**MATH LITERACY CLASS FACILITATOR ALLAN HANCOCK COLLEGE**

January 2017 – May 2017

Responsibilities included assisting professor with in-class instruction, working both one-on-one and with groups of students, providing students with easy access to a tutor, teaching Excel, and organizing study groups to help at-risk students.

**EVENT COORDINATOR GUISEPPIE'S CUCINA ITALIANA**

August 2015 – June 2018

Began employment as a busser; advanced to server, bartender, and ultimately banquet coordinator. Responsibilities included managing kitchen and service staff for events and interfacing with guests to assure quality service.

**PERSONAL | SCHOLARSHIPS**

- **ESTEEM** Enhancing Success in Transfer Education for Engineering Majors Scholarship
- **ANSELMO J. MACCHI** Engineering and Science Scholarship
- **FLORENCY TANGNEY** Scholarship
- **LYDIA LO** Scholarship

**AWARDS**

- Skills USA Electronic Technology Competition, Silver Medal

- A+ Certified

## SKILLS

- Circuit Design and Analysis
- PCB Layout
- C, C++, JAVA, MATLAB, PASCAL, PYTHON, SQL, RISC-V
- VHDL
- Mathematics

## HOBBIES

- Designing and building digital circuits
- Software engineering

## PUBLICATIONS

### ***A FLIGHT CAPABLE ATOMIC GRAVITY GRADIOMETER WITH A SINGLE LASER (2020)***

Storm Weiner;Xuejian Wu;Zachary Pagel;Dongzoon Li;Jacob Sleczkowski;Francis Ketcham;Holger Mueller

## REFERENCES

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