# **Batya Vishnepolsky**

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### **Education**

Honors College at University of Nevada, Las Vegas Fall 2023 Bachelor of Science in Electrical Engineering GPA: 3.81

#### **Technical Skills**

C++, SystemVerilog, RISC-V, LTspice, Kicad, Dip Trace, Cadence, Visual Studio, SystemVerilog, Quartus II, ModelSim, MATLAB, Python

#### **Work Experience**

# **Undergraduate Research Assistant**

10/2021 -

Advisor: Dr. R. Jacob Baker, UNLV ECE

- Solder SMD and through hole parts onto PCBs.
- Packaging chips using wire bonding techniques.
- 3D printing using Cadence software.
- Temperature chips tested for NASA contract on the development of Tiled Silicon

## Guidance, Navigation, & Control Satellite Engineer

5/2022 -

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**UNLV** RebelSat

- Design and analysis of satellite attitude determination and control systems.
- Develop Helmholtz cage and test procedures for 3U CubeSat
- Design detumbling simulations on MATLAB
- Implement and delegate tasks to other members of the GNC team.

Tutor/ TA 01/2017 -

- Tutor math ranging from middle school curriculum through differential equations.
- Tutor high school chemistry on normal and AP level. College chemistry equivalent to UNLV courses CHEM 103, 121, and 122.
- Tutor electrical and computer engineering classes. Equivalent to UNLV courses CPE 100, 200, EE 220, and 221.
- TA for various math and engineering classes at UNLV.

#### **Projects**

| •                    | BNO080 PCB design and implementation.                                  | Fall 2021   |
|----------------------|--|-------------|
| •                    | Minesweeper on C++   | Fall 2021   |
| •                    | IR detector circuit on PCB   | Spring 2022 |
| •                    | Card guessing game implemented on Altera DE2-115 board with Quartus II | Spring 2022 |
| •                    | Raspberry Pi Pico Python script for automated temperature testing.     | Summer 2022 |
| •                    | Level 1 high power rocket (in progress).                               | Fall 2022   |
| onors and Activities |  |             |

#### **Honors and Activities**

- Languages: English (native), Russian (native)
- Dean's list academic distinction 2020 - 2022 • Mitzi and Johnny Hughes Honors Scholarship 2020 - 2024 • Kenneth R. Site Electrical and Computer Engineering Scholarship 2022 - 2023
- Hyperloop Nevada member
- SEDS UNLV member