# ELENA SOKOLOVA

Electrical engineer with 6 years across power electronics and embedded firmware for battery storage products. Took two converter platforms from breadboard to UL listing. Strong on cross-discipline work with mechanical and firmware teams.

## Contact Information


(801) 555-0167

elena.sokolova@example.com

Linkedin.com/in/elena-sokolova-eng

Salt Lake City, UT


## Education

B.S. Electrical Engineering
Colorado School of Mines May 2018

- Coursera Specialization: Power Electronics (University of Colorado Boulder), 2021

## Key Skills

- Altium Designer, KiCad
- LTspice, PLECS
- Embedded C, STM32 / NXP
- Power electronics (DC-DC, inverter)
- UL 1741, IEEE 1547, IEC 61000
- Oscilloscope, LCR, network analyzer
- Python for test automation
- DFMEA, design reviews

## Professional Experience

**Electrical Engineer | February 2022 - Present**
Kestrel Energy Systems, Salt Lake City, UT

- Designed the gate driver and protection board for a 15 kW bidirectional inverter; passed UL 1741 SA on first submission.
- Reduced standby losses on the auxiliary supply by about 22% through a redesigned flyback stage.
- Owned the BOM for two product variants and worked with sourcing to qualify a second magnetics vendor after a 14-week lead time spike.
- Wrote the EMC test plan and supported three pre-compliance trips at a Salt Lake lab.

**Hardware Engineer | August 2019 - January 2022**
Tessera Microgrid, Boulder, CO

- Laid out 4 and 6 layer mixed-signal PCBs in Altium for grid-tied monitoring units.
- Debugged a recurring CAN bus error that had been open for nine months and root-caused it to a ground loop in the test fixture.
- Built a Python-based regression harness that cut board bring-up time from a full day to under two hours.
- Wrote firmware patches in C for the STM32 monitoring MCU when the firmware team was capacity-constrained.

**Test Engineer | June 2018 - July 2019**
Veridian Powertrain, Loveland, CO

- Ran HALT and thermal cycling on traction inverter samples for a Tier 1 automotive customer.
- Authored 11 test reports that fed the PPAP submission for the customer's 2019 model year program.
- Maintained the lab's calibration log and brought the lab back into ISO 17025 compliance after an internal audit finding.