PAULINA "PASHA" POGREBNYAK

ELECTRICAL, HARDWARE AND SYSTEMS ENGINEER

425-295-9264 | paulina.pogrebnyak@gmail.com | LinkedIn: paulina-pogrebnyak

Robotics Engineering Technology student at Purdue University with hands-on experience spanning custom PCB design, embedded controls, and international systems requirements management. Proven track record collaborating with distributed global engineering teams to execute complex technical migrations and build robust wireless monitoring hardware. Skilled in bridging electrical design, and EDA prototyping.

EDUCATION

Purdue University Expected May 2028

Bachelor in Robotics Engineering Tech, Minor in Electrical Engineering Tech | ***Purdue University***

EXPERIENCE

Spacelabs Healthcare May 2026 - August 2026

Electrical and Systems Engineer

- Electrically debugged and validated patient vital simulators using oscilloscopes and proprietary medical test equipment.
- Diagnosed root-cause ESD vulnerabilities to restore measurement accuracy across primary laboratory test equipment.
- Leveraged Altium Designer to engineer a custom PCB for precise 3-axis (X-Y-Z) motion control of an automated test fixture.

tinyLab @ Purdue University Dec 2024 - May 2026

Undergraduate Researcher

- Hand-soldered the completed PCB with components as small as 0603 (1.60 x 0.80 mm).
- Verified PCB layout and electrical correctness, including trace length, spacing, and parallel routing to ensure current safety, signal integrity, and minimal interference.
- Designed a wireless power-monitoring PCB and sensor hub to detect voltage and current irregularities across a heliostat solar field using Wi-Fi and LoRaWAN technology.

Bechtel Innovation Design Center @ Purdue University February 2026 - May 2026

PCB Prototyping Specialist / Student Technician

- Fabricated rapid prototype circuit boards utilizing both additive and subtractive manufacturing methods, operating an Accurate 636 CNC PCB Mill and a Volterra V-One PCB Printer.
- Fine tuned solder paste dispensing, component placement, and thermal reflow profiling on the Volterra.
- Prepared and processed Gerber files from KiCad EDAto optimize trace clearances, and copper rubout.

TECHNICAL SKILLS

Lab & Prototyping Tools: SMD/Through-Hole Soldering & Board Rework, Electrical Bench Tools, Micro-soldering & Hand-soldering

Hardware, PCB & EDA: Custom Footprints & Symbol Creation, Circuit Analysis, Electrical Troubleshooting.