

Ron Volkovinsky

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EDUCATION

Georgia Institute of Technology

May 2020 – December 2023

BS Chemical Engineering, Minor Materials Science and Engineering

EXPERIENCE

Intel

Hillsboro, OR

Device Yield Engineer

January 2026 – Current

- Led weekly inline chart review for 8 products across 2 technologies, worked with yield and integration to find root cause for inline electrical performance deviations from target
- Worked with integration task force to find wafers affected by chemical contamination, stopped over 300 affected wafers from shipping to customer
- Used JMP to analyze over 20 whitepaper process changes, ensuring performance match to target

Wet Etch Equipment Engineer

March 2024 – January 2026

- Owned 12 scrubber machines, kept average machine availability above 95% by collaborating with technicians for regular maintenance, upgrades, and troubleshooting.
- Drove continuous improvement of first-of-kind wet etch tool by finding root cause of robot arm failures and initiating redesign of fluid handling system after finding fluid in vapor manifold
- Implemented new automation flow for scrubber process control charts, 2x reduction in technician labor
- Owned and presented wafer-handling robot failure to quality team, used 8D methodology to isolate root cause to worn key shaft and then wrote a new procedure for key degradation check and replacement.

Dow Chemical

Lake Jackson, TX

Polymer Characterization R&D Intern

May 2023 – August 2023

- Fingerprinted novel GPCxHTLC characterization instrument to collect polymer composition data
- Found back pressure buildup in the instrument, initiated design change with new pump
- Developed automated data analysis Python script, faster than manual-input vendor software

Ereztech

Sheboygan, WI

Process Engineering Intern

May 2022 – August 2022

- Converted small-batch organometallic precursor process to continuous pilot using wiped film evaporator
- Worked with analytical department to develop GC-MS baseline and procedure for key products
- Designed and ran DOE to improve product purity, found solvent contamination, increasing purity 15%
- Trained in and completed an ISO 9001/2015 Design & Development internal audit

Undergraduate Research, Multiple Labs

Atlanta, GA

Undergraduate Researcher

May 2021 - May 2023

- Predicted derivatives of sets of differential equations with classical methods, comparing their performance to neural networks. Published in *Engineering Applications of Artificial Intelligence*
- Developed a database with MongoDB and Python for data-driven polymer informatics. Published in *Chemistry of Materials* on big data collection for polymer semiconductor process development
- Trained in clean room and glovebox for lab-scale manufacture of organic semiconductor devices

LEADERSHIP

Open Polymer Active Learning Laboratory (OPALL)

Atlanta, GA

Founding President

August 2021 – May 2023

- Managed over \$100,000 in funding to grow a polymer chemistry and biomaterials makerspace
- Led hands-on events and demos of industry-standard polymer characterization instruments
- Reviewed procedural, engineering, and administrative safety controls for all experiments

SKILLS

Electromechanical troubleshooting and root cause analysis, SPC, DOE, JMP, SQL, Python (pandas, scikit-learn, PyTorch, numpy, scipy), materials characterization