Thomas Askharoun

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Education

The Pennsylvania State University, University Park, PA — **Expected May 2027**
B.S. Electrical Engineering — **GPA: 3.6/4.0**

Experience

Undergraduate Research, Penn State EE Dept — Aug 2025 – Present
- Developing novel AI–VR/AR integration systems under Prof. Bin Li

Wafer Test Operator, iDeal Semiconductor, Bethlehem, PA — Feb 2024 – Apr 2024
- Conducted high-voltage diode & MOSFET testing with MPI microprobe; ensured ESD compliance
- Streamlined data workflow, reducing test cycle time by 15%

Software Engineer Intern, Esync Technologies (Remote) — May 2024 – Aug 2024
- Engineered AI-powered educational features, boosting user engagement by 22%
- Collaborated with cross-functional teams to optimize workflows

Emergency Dispatcher, Six Flags, Allentown, PA — Feb 2024 – Aug 2025
- Coordinated real-time crisis response across a 200-acre facility; authored protocols adopted department-wide

Undergraduate Research, Penn State EE Dept — Aug 2025–Present
- Integration of AI agents & VR/AR systems under Prof. Bin Li.

Wafer Test Operator, iDeal Semiconductor (Lehigh Valley, PA) — Feb 2025–Present
- High-voltage diode & MOSFET testing with MPI microprobe tester and SENTIO Software.
- Ensured ESD compliance and streamlined data flow.

Software Engineer Intern, Esync Technologies (Remote) — May 2024–Aug 2024
- Built and maintained AI-powered educational features.
- Brainstormed workflow improvements with cross-functional teams.

Emergency Dispatcher, Six Flags (Allentown, PA) — Feb 2024–Present
- Coordinated crisis response and ride-control communication.
- Authored quick-reference protocols for emergencies.

Technical Projects

Tone-Control & Karaoke Audio Amplifier — Apr 2025 – Apr 2025
- Designed five-stage op-amp circuit; simulated in Multisim, breadboarded, and fabricated PCB

Space Logistics Optimization *(Competition Winner)* — Jan 2024 – Apr 2025
- Secured $10,000 seed funding by developing a space logistics optimization algorithm with a group of 7
- Multi-university collaboration under NDA with MIT, Rice, and Georgia Tech teams

Personal Portfolio Website — May 2025 – May 2025
- Built a fully responsive site in HTML/CSS/JS to showcase projects and experiance used AI for JS

Bluetooth CarPlay Adapter — May 2025 – Present
- Designing custom CarPlay adapter PCB: schematic drafting, PCBWay fabrication, parts selection

Tone-Control & Karaoke Audio Amplifier Apr 2025–May 2025

- Multisim design of five-stage op-amp circuit with Baxandall tone control.
- Breadboard prototyping, PCB soldering, and performance reporting.

Personal Portfolio Website Apr 2024–May 2024

- Coded in HTML & CSS; AI-assisted JavaScript via ChatGPT/v0.dev.
- Responsive layout showcasing all projects with analytics.

Proposal Writer & Evaluator (*Winner*) Jan 2024–Apr 2025

- Won $10 000 seed funding for space-logistics optimization.
- Collaborated under NDA with SMEs at MIT, Rice, and Georgia Tech.

Bluetooth CarPlay Adapter Ongoing

- Research phase: schematic planning, PCBWay fabrication, procurement, and soldering.

Technical Skills

Programming:	MATLAB, Python, HTML/CSS
Hardware:	Circuit Design, PCB Layout, Wafer Testing, MPI SENTIO
Tools:	Multisim, LaTeX, PCBWay, Oscilloscopes, Function Generators
Specialties:	Embedded Systems, AI Integration, VR/AR, Semiconductor Testing

Leadership & Activities

- Vice President, Orthodox Christian Fellowship: led fundraising initiatives raising $700+
- Tri-Alpha Honor Society: recognized for academic excellence and community service
- Middle School Sunday School teacher: going on retreats and preparing lessons on Sundays