Presenter Short CV

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Turgut Mert Aksoy is an Electrical and Electronics Engineering student at Gazi University, Ankara, Türkiye, expected to graduate in August 2026. He will undertake an engineering internship at TÜBİTAK UME (National Metrology Institute), Kocaeli, Türkiye, starting in July 2026. His research interests include power electronics, smart grid converter topologies, and embedded control systems.

As his graduation project, he designed and implemented a 1 kW two-stage power electronics system, combining a Boost Power Factor Correction (PFC) front-end with a Phase-Shifted Full-Bridge (PSFB) DC/DC converter, achieving 0.995 power factor, 3.68% THD, and 93.94% overall efficiency. He developed the PI control algorithm and embedded firmware on an STM32 microcontroller, designed the gate driver circuits, and carried out the PCB fabrication.

He has also served as team captain and mentor in multiple TEKNOFEST engineering competitions, working on motor drive systems and PLC-based industrial automation.

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