

ABHIJIT DAS, Ph.D.

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LinkedIn: adas7232 — Energy & Strategy Publications — U.S. Citizen

EXECUTIVE PROFILE

Engineering and Energy Systems Leader with 15+ years of experience delivering complex electrification programs in regulated and infrastructure-constrained environments. PhD in Electrical Engineering (4,000+ citations) and Duke Executive MBA candidate. Known for aligning large-scale BEV platforms with grid capacity realities, regulatory milestones, and cross-functional execution. Proven record of delivering \$10M+ in cost savings, leading multi-disciplinary teams, and driving structured decision-making across high-stakes programs.

EDUCATION

Duke University, Fuqua School of Business <i>Executive MBA</i>	2024 – 2026 (Expected) Durham, NC
University of Texas at Arlington <i>Ph.D. in Electrical Engineering (Nonlinear and Adaptive Control Systems)</i>	2006 – 2010 Arlington, TX

- Recipient of Dean Dissertation Fellowship and STEM Doctoral Fellowship.

CORE EXPERTISE

- Energy Systems Strategy: Grid-Constrained Electrification, Transmission Congestion Awareness, Load Growth Planning, Zero-Emission Technology Pathways, V2G Infrastructure Alignment.
- Leadership & Governance: Cross-functional Program Leadership, Executive Decision Reviews, Agile/DevOps Integration, Regulatory Compliance, Mentorship.
- Financial & Strategic Analysis: Capital Allocation (IRR/WACC/NPV), Energy Market Signals (LMP/ISO Awareness), Risk Management under Infrastructure Constraints.
- Technical Foundation: Systems Engineering, Control Systems, Vehicle Architecture, Heavy-Duty Electrification.

PROFESSIONAL EXPERIENCE

Volvo Trucks North America <i>Lead System Strategist – Battery Electric & ICE Trucks</i>	2021 – Present Greensboro, NC
<ul style="list-style-type: none">Provide system-level leadership for 5 concurrent BEV and ICE vehicle programs, aligning electrification roadmaps with regulatory milestones, charging readiness, and heavy-duty grid capacity constraints.Direct coordination across engineering, validation, purchasing, and compliance organizations; own prioritization, trade-offs, and delivery sequencing for major platform commitments.Co-chair, SAE Heavy Duty Charging Consortium; influence international standards for vehicle-to-grid interfaces and large-load electrification integration.Replaced legacy decision processes with structured governance workflows, materially improving transparency, review readiness, and executive decision velocity.	

- Omni Powertrain Technologies** 2020 – 2021
Houston, TX
Engineering Manager – Electrical
- Established and led the North American eMobility engineering function, scaling capability to support fully electric and hybrid vehicle programs.
 - Increased project success metrics by 60% and improved organizational efficiency by 30% through disciplined Agile and Azure DevOps implementation.
 - Directed cross-regional technical execution to meet customer, regulatory, and maintainability requirements.

- Halliburton** 2019 – 2020
Houston, TX
Principal R&D Engineer
- Delivered \$10M+ in cost savings by developing predictive modeling and simulation frameworks that reduced physical testing and capital expenditure.
 - Introduced Agile and version control discipline across global R&D teams, accelerating time-to-market and improving cross-team collaboration.

- Danfoss & Caterpillar Inc.** 2010 – 2019
USA
Engineering Roles – Controls, Systems, Product Strategy
- Led engineering initiatives that secured over \$1M in new customer contracts across advanced electrified platforms.
 - Optimized validation cycles and compliance processes, improving product reliability and accelerating market entry for energy-intensive equipment.

STRATEGIC ENGAGEMENTS & RESEARCH

- Applied Research: Energy Markets & Innovation** 2026
Fuqua School of Business, Duke University
- Developed an applied framework for mitigating U.S. transmission congestion using GETs and flexible demand coordination under reliability and market constraints.
- Student Consultant — Fuqua Client Consulting Practicum** Jan 2025 – June 2025
Client: Tapestry Networks
- Led go-to-market strategy development for executive education initiatives, delivering pricing and positioning recommendations using structured competitive frameworks.

AWARDS & RECOGNITION

- Technical and Service Excellence Award (2017)
- Certificate of Appreciation for cross-functional leadership (2016)
- Secured \$1M+ in new customer contracts
- Delivered \$10M+ cost savings through simulation-driven optimization

PATENTS & TECHNICAL CONTRIBUTIONS

- Holder of 5+ granted and pending patents across electric vehicle systems, control architectures, and fluid power technologies.
- Author of technical publications in nonlinear and multi-agent control systems with 4,000+ academic citations.
- Full list of patents and publications available at: abhijitdas.info/publications

AFFILIATIONS

- Co-chair, SAE Heavy Duty Charging Consortium
- Senior Member, IEEE