

# ABHIJIT DAS, Ph.D.

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

## EXECUTIVE PROFILE

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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

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| <b>Duke University, Fuqua School of Business</b><br><i>Executive MBA</i>  | <b>2024 – 2026 (Expected)</b><br>Durham, NC |
| <ul style="list-style-type: none"><li>• Executive focus on capital allocation and financial decision-making (NPV, IRR, WACC) for technology-driven organizations.</li><li>• Applied strategy and value chain analysis to complex industrial and infrastructure systems.</li><li>• Coursework in organizational leadership, competitive strategy, and market-driven decision frameworks.</li></ul> |   |
| <b>University of Texas at Arlington</b><br><i>Ph.D. in Electrical Engineering (Nonlinear and Adaptive Control Systems)</i>  | <b>2006 – 2010</b><br>Arlington, TX         |
| <ul style="list-style-type: none"><li>• Recipient of Dean Dissertation Fellowship and STEM Doctoral Fellowship.</li></ul>   |   |

## CORE EXPERTISE

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- 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

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| <b>Volvo Trucks North America</b><br><i>Lead System Strategist – Battery Electric &amp; ICE Trucks</i>   | <b>2021 – Present</b><br>Greensboro, NC |
| <ul style="list-style-type: none"><li>• 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.</li><li>• Direct coordination across engineering, validation, purchasing, and compliance organizations; own prioritization, trade-offs, and delivery sequencing for major platform commitments.</li><li>• Co-chair, SAE Heavy Duty Charging Consortium; influence international standards for vehicle-to-grid interfaces and large-load electrification integration.</li><li>• Replaced legacy decision processes with structured governance workflows, materially improving transparency, review readiness, and executive decision velocity.</li></ul> |   |

## **Omni Powertrain Technologies**

**2020 – 2021**

*Engineering Manager – Electrical*

Houston, TX

- 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**

*Principal R&D Engineer*

Houston, TX

- 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**

*Engineering Roles – Controls, Systems, Product Strategy*

USA

- 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**

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### **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**

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- 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**

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- 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](http://abhijitdas.info/publications)

## **AFFILIATIONS**

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