# VENKAT TIRUPAT

# ENGINEERING | OPERATIONS | TECHNOLOGY LEADER

Austin, TX, USA

#### **SUMMARY**

- An accomplished and versatile leader with over 21 years of experience across grid and energy market operations, grid planning, IT and OT solutions, software development, strategic planning, cybersecurity, risk management and regulatory
- Demonstrated success in leading high-performing teams, cross-functional organizational groups, and industry-wide task forces and initiatives.
- Recognized for strong strategic acumen, clear direction-setting, and sound decision-making.
- Proven ability to bridge technical and business domains to drive operational excellence and innovation in complex, fast-evolving energy environments.

#### **EXPERIENCE**



Vice President, DevOps and Grid Transformation & previously Director/Sr. Director, Grid and Market Solutions

**ERCOT** 

Electric Power Grid & Market Operator of Texas

- Established the GRIT (Grid Research, Innovation, and Transformation) organization to drive forward-looking strategy and prepare the company for the evolving energy future.
- Established multiple strategic partnerships and collaboration agreements with leading vendors and academic institutions.
- Serve 200+ team members working on Technology Development and Operations Support. Responsible for technical roadmaps, SDLC processes & vendor management.
- Delivered several high impact projects on-time and within budget.



Director, Line of Business & previously Manager, Market Systems and Supervisor, EMS & Advanced Applications

Austin, United States Produce and Deliver Electric Power to Texans

- · Aligned digital services strategic and operating plans, goals, objectives, priorities and procedures with strategic goals and objectives of lines of business, wholesale power and water.
- · Championed the adoption of data analytics and AI/ML technologies, leading key implementation initiatives such as PM for power plants.
- Successfully led the upgrades of Energy Management System (EMS) and Generation Management System (GMS) on-time and within budget.
- Taught Error Elimination Tools and Human Performance Improvement classes



# Senior Reliability Engineer

# North American Electric Reliability Corporation

Electric Reliability Organization

- Led the assessment of 100+ events that are reported to NERC through the Event Analysis (EA) program, to determine the contributing and root
- Developed 10+ reliability risk mitigation strategies and disseminated to industry stakeholders.



# Power System Applications SW Engineer/Sr. SW Engineer

Siemens

Power Transmission and Distribution

- · Implemented numerous cutting-edge solutions in the advanced network applications and operator training simulator modules of grid management products.
- · Acted as technical lead across diverse projects, driving task definition, timeline management, stakeholder communication, and team enablement through delivery and support.
- · Ran system planning and protection studies for various utility customers.



#### To Be, To Do, To See & To Tell

#### SKILLS

Grid and Market Operations Strategic Planning

Risk Management **Technology Management** 

Innovation & Transformation **Grid Planning** 

Data Analytics & AI/ML DevSecOps

**Project Management Business Architecture** 

# **AWARDS**



Outstanding IT Manager, 2019 Texas Public Sector CIO Academy

# **EDUCATION**



Master of Business Administration

Massachusetts Institute of Technology

Master of Science in Electrical Engineering Illinois Institute of Technology

Bachelor of Engineering, Electrical University of Mumbai

苗 1998 - 2002 👂 Mumbai, India

# CERTIFICATION

### **Professional Engineer**

Texas Board of Professional Engineers & Land Surveyors

# RECENT SPEAKING ENGAGEMENTS



Keynote presentation at Energy Systems Integration Group Fall Technical Workshop

**#** 04/2025

Challenges and Opportunities in the Texas Power Grid - ERCOT perspective



Distributech - Panel Discussion

**m** 03/2025

Inside the ISOs - Grid Operators perspective on energy transition



Invited Talk at AAAI conference for Artificial Intelligence

**m** 02/2025

The Essential role of explainable Al in Power **Systems Applications** 

