

# Tarun Prakash

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## EXPERIENCE

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### Nominal, Los Angeles, CA

Mission Operations Engineer

Sep 2025 – Present

- Led on-site deployment and operation of Nominal for aerospace and defense customers, ingesting high-rate telemetry across live ops, tests, demos, and pilots while serving as primary technical owner for ~\$2.5M in customer contracts
- Scaled platform usage to 50 TB of customer data (+440%) by directly ingesting and validating high-rate telemetry streams, debugging schema mismatches and data quality issues at both the data and UI layers using Python
- Unblocked flight tests and reviews within 48 hours by diagnosing a production data-typing failure affecting live telemetry, coordinating with on-call backend engineers, and driving a fix that was productized and rolled out to all customers
- Built and delivered a repeatable, on-site training program for engineers and operators, reducing support load, accelerating adoption, and enabling customer teams to self-serve across new workflows and use cases
- Leading a company-wide initiative to embed software engineers with customers, establishing forward-deployed engineering rotations to accelerate issue resolution, product feedback, and deployment velocity in mission-critical environments

### SpaceWERX, El Segundo, CA

Fellow

May 2025 – Aug 2025

- Executed transition reporting for STRATFI/TACFI investments by developing quad charts, milestone schedules, and risk mitigation plans, aligning growth-stage programs with senior acquisition authorities and ROI objectives
- Advanced SBIR/STTR technology transitions into operational use by coordinating TRL/MRL assessments, end-user engagement, and acquisition pathways with startup founders, investors, technical POCs, and senior leadership

### U.S. Space Force, El Segundo, CA

Structures Engineer

Sep 2024 – Aug 2025

- Certified 4 National Security Space Launch (NSSL) Falcon 9 missions as primary reviewer for dynamics and actuation hardware readiness, exercising go/no-go authority to ensure flight readiness of national security payloads
- Resolved Falcon 9 engineering changes and flight anomalies by evaluating test and flight data against mission assurance standards, driving corrective actions and launch decisions under time-constrained operational conditions
- Enabled reliable vehicle mechanism operations through close collaboration with SpaceX, NASA, Aerospace Corp, and the NRO across build, integration, and launch activities supporting mission execution

### Nize, Pleasanton, CA

Cofounder & Chief Operating Officer

Aug 2018 – Jul 2024

- Launched 4 edtech products, saving \$500K and 4,000 hours per school annually by streamlining administrative workflows
- Increased user engagement 40% by iterating on UI using session-length analysis and feature adoption metrics
- Deployed 100 devices/school, integrating software and hardware to overcome network and device provisioning challenges

### SpaceX, Hawthorne, CA

Propulsion Engineering Intern

May 2023 – Aug 2023

- Enabled flight-like testing for a \$72M NASA Artemis propulsion program by leading integration of a 4-stage compressor system
- Influenced go/no-go decisions and test limits by analyzing test data, identifying performance constraints and safety margins
- Built automation repeatedly used by the team to compute thermodynamic efficiencies during live propulsion testing

### Tesla, Palo Alto, CA

Mechanical Design Engineering Intern

May 2022 – Aug 2022

- Designed a motor dyno fixture with integrated cooling channels, improving both production testing and engineering validation
- Selected a production supplier by analyzing QC data across 3 vendors, helping define acceptance criteria for drive units

### Maurice J. Zucrow Laboratories, West Lafayette, IN

Propulsion Test Engineer

May 2021 – May 2022

- Led hazardous propulsion test operations, executing 10 hot-fire tests per day while monitoring 100 data channels per test
- Reduced operator workload and response time by developing automation for test control, sequencing, and real-time visualization
- Delivered performance data used in design reviews and hardware modifications for in-space thruster development

## EDUCATION

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### Purdue University, West Lafayette, IN

Bachelor of Science in Mechanical Engineering

May 2024

Minor in Organizational Leadership; Certificate in Entrepreneurship and Innovation