ZOYEM LABS

ENGINEERING CAPABILITY STATEMENT

Zoyem LLC (operating as Zoyem Labs) is an independent engineering technology company offering focused technical studies in guidance, navigation and control (GN&C), modeling and simulation, control-system analysis, and verification-oriented engineering. Aerospace and spacecraft rendezvous and proximity operations are our initial commercial focus.

ENGINEERING SERVICES

- **Guidance, navigation & control**
  Vehicle dynamics, control architecture, constrained-control concepts, performance and feasibility studies.
- **Modeling & simulation**
  Numerical models, test scenarios, sensitivity analysis, Monte Carlo study planning, and documented simulations.
- **Robustness & failure analysis**
  Actuator-loss assumptions, fault scenarios, safety constraints, control-authority and recovery trade studies.
- **Verification-oriented studies**
  Traceable evaluation criteria, independent technical assessment, numerical evidence, and documented limitations.
- **Applied research support**
  Literature review, feasibility definitions, bounded algorithm prototyping, technical reports and R&D work packages.

EXAMPLE CONTRACT DELIVERABLES

Assumptions and requirements memo | Simulation or analysis package | Benchmark and trade-study results | Test plan and evidence summary | Technical recommendations

ENGAGEMENT MODELS

Small technical studies, time-and-materials engineering support where appropriate, scoped fixed-price engagements, technical subcontracts and research teaming. Scope, staffing, cost, and acceptance criteria are agreed before starting work.

ZOYEM LABS

ENGINEERING CAPABILITY STATEMENT

RESEARCH STATUS — NO PRODUCT CLAIM

METIPORA™ is a research initiative investigating mission-capability preservation. SAFE-RPO is a proposed offline spacecraft fault-recovery analysis concept; no SAFE-RPO tool has been built. Earlier simplified research simulations have not yet been independently reproduced or validated by Zoyem. Neither initiative is commercially available software, flight-ready, or a safety certification service.

RELEVANT TECHNICAL FOUNDATION

The founder's professional GN&C and control engineering experience, doctoral work, and published research inform Zoyem's service scope. Published topics include constrained and distributed control, model predictive control, robust safety, and multi-agent coordination. Founder experience must not be construed as company contract past performance.

COMPANY INFORMATION

Legal entity	Zoyem LLC
Operating name	Zoyem Labs
UEI	RQ36C9G8G9J1
CAGE	261Z2
Veteran-owned	Texas Veterans Commission verification (state-level)
SBA VetCert	Status to be verified before reliance or representation
Primary service classifications	Engineering services; engineering R&D; technical consulting

CONTRACTING & TEAMING

We welcome requests for scoped engineering studies and conversations about subcontracting, teaming and funded R&D. Please provide a non-sensitive description of the technical question, desired deliverables, timeline and procurement route.

CONTACT

contact@zoyemlabs.com | https://zoyemlabs.com/contact.html

Representations about company registrations, certifications, staffing, facilities, licenses and eligibility should be confirmed for the specific solicitation before submission. No claim of completed Zoyem customer projects, cleared personnel or integration-ready proprietary software is made here.