



BUILDING THE OPERATIONAL INTELLIGENCE LAYER
FOR THE MARITIME INDUSTRY.

- AI SYSTEMS
- RESEARCH
- ENGINEERING
- MARITIME

01

ENTERING AHUMLABS

Ahum Labs is a Forward Deployed Engineering company. We work inside complex organisations to understand critical workflows, integrate intelligence with existing systems, and deliver measurable operational outcomes.



02

THE SHIFT WE BELIEVE IN

The maritime industry stands at an inflection point. The systems that powered the last decade cannot power the next.

- FRAGMENTED OPERATIONS**
Critical processes live across disconnected software, spreadsheets, emails and people. Information is everywhere, and clarity is nowhere.
- MANUAL DEPENDENCY**
Repetitive work consumes talent. Knowledge locked in individuals creates risk, delays and inefficiency.
- DATA WITHOUT INTELLIGENCE**
Data exists in abundance, but without context, connection and intelligence, it cannot drive decisions.
- AI WITHOUT INFRASTRUCTURE**
AI tools are powerful, but without an integrated operational foundation, they create more complexity, not less.



WE ARE BUILDING THE OPERATIONAL INTELLIGENCE LAYER THAT MAKES THIS SHIFT POSSIBLE.



Connect
systems, data, workflows and people.



Apply AI to
extract insight, predict and adapt.



Eliminate
repetitive work and elevate human impact.

Continuously
learn, optimize and create value.

03

WHY AHUMLABS EXISTS

We didn't start Ahumlabs to build another software company. We started it to solve real problems we saw, up close.

Across ships, offices and conversations with professionals, a pattern emerged — manual work, fragmented systems and buried knowledge were holding the industry back.

Existing software wasn't built for the way maritime businesses actually operate. And AI, in its current form, couldn't help because the foundation itself was broken.

Ahumlabs was born from the belief that the maritime industry deserves systems that are intelligent, connected and built for the future.



THE PROBLEMS WE SAW



FRAGMENTED SYSTEMS

Critical data spread across multiple tools, platforms and spreadsheets.



MANUAL PROCESSES

Repetitive, time-consuming work draining productivity and increasing risk.



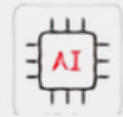
BURIED KNOWLEDGE

Important information locked in emails, documents and individuals.



LACK OF VISIBILITY

Teams operate in silos with limited insight into the bigger picture.



AI WITHOUT CONTEXT

Without connected data and context, AI cannot deliver meaningful value.

OUR SOLUTION



Build the operational intelligence layer that connects systems, brings context and enables autonomous operations.

OUR BELIEF

When systems are connected and context is unified, intelligence can flow. People are empowered. Decisions are faster. Operations become autonomous.



THAT IS THE FUTURE
WE ARE BUILDING.

04

OUR THINKING

Our thinking defines how we build, solve and evolve.

We believe the most powerful systems are not built with more code, but with better understanding of people, operations and context.

Our thinking is shaped by first principles, continuous curiosity and a long-term commitment to meaningful change in the maritime industry.

THE BELIEFS THAT GUIDE US



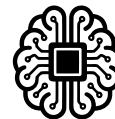
RESEARCH BEFORE ASSUMPTIONS

We don't assume we know the problem. We listen, observe and immerse before we design any solution.



SYSTEMS BEFORE SOFTWARE

We look at the entire ecosystem. We design the right architecture before writing a single line of code.



AI AS INFRASTRUCTURE

AI is not a feature we add. It is the foundation that powers intelligence, decision-making and autonomy.



ENGINEERING OVER PRESENTATIONS

We believe in building, testing and shipping. Real progress is measured in working systems, not slide decks.



CONTINUOUS OVER ONE-TIME

We build for evolution. We iterate, learn and improve continuously alongside our partners.



PARTNERSHIP OVER TRANSACTION

We don't work for clients. We work with them as long-term partners in their transformation journey.

Make complex operations simple, connected and intelligent.

When systems are connected and context is unified, intelligence can flow. People are empowered. Decisions are fast. Operations become autonomous.



IGNORANCE
We start with not knowing.



INSIGHT
We research, observe and find patterns.



INTELLIGENCE
We design systems that understand.



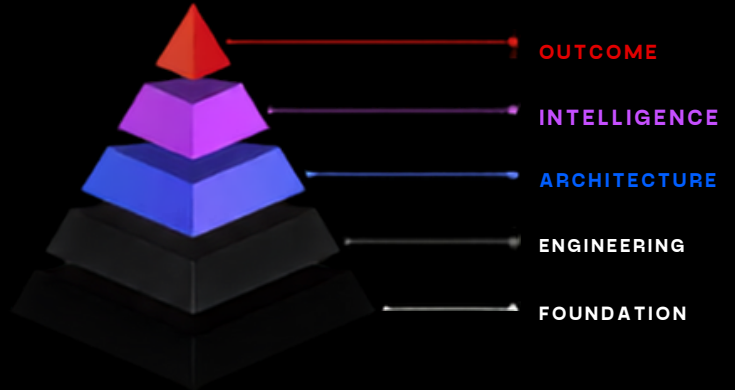
IMPACT
We enable autonomous operations.

05

OUR ENGINEERING PRINCIPLES

Every system we build is guided by a set of engineering principles that shape our decisions, architecture and execution.

Principles are not statements. They are standards we live by.



01

RESEARCH FIRST

We begin every engagement by understanding the domain, the people and the problem. Research is the foundation of every solution we build.

Industry Interviews
Workflow Analysis
Problem Deep-Dive
User Immersion

02

SYSTEMS BEFORE SOFTWARE

We design the full system before writing a single line of code. Architecture, data flow and integrations come before features and interfaces.

End-to-End Mapping
Data & Process Design
Integration Planning
Scalable Architecture

03

AI-NATIVE BY DESIGN

AI is not an add-on for us. We design every system to be intelligent, adaptable and capable of learning continuously from real-world operations.

AI as Core Layer
Context-Aware Systems
Learning & Adaptation
Autonomous Operations

04

ENGINEERING EXCELLENCE

Clean code, robust testing and thoughtful documentation are non-negotiable. We build systems that are reliable, secure and maintainable.

Clean & Modular Code
Testing & Quality
Security by Design
Documentation

05

SHIP FAST, LEARN FASTER

We deliver quickly, validate early and iterate continuously. Speed is important, but learning is critical.

MVP First
Feedback Loops
Iterate & Improve
Measure Impact

06

LONG-TERM PARTNERSHIP

We grow with our partners. We are invested in their success and committed to building systems that evolve with them.

Aligned Goals
Continuous Support
Shared Ownership
Long-Term Impact

OUR PROMISE

We don't just build software. We engineer systems that create lasting operational impact.

Good engineering transforms complexity into clarity, and systems into advantage.

06

MARITIME INTELLIGENCE

OUR FOCUS. OUR EXPERTISE. OUR COMMITMENT.

Years of conversations with ship managers, operators, brokers, creating agents and maritime professionals shaped our understanding of the real world.



- We understand the operations.
- We speak the language.
- We know the challenges.
- We build what truly matters.

WHY MARITIME?



CRITICAL TO THE WORLD

Over 90% of global trade moves by sea. Maritime keeps the world connected, powered and supplied.



COMPLEX BY NATURE

Multiple stakeholders, strict regulations, legacy systems and global operations create extraordinary complexity.



PEOPLE AT THE HEART

At every level, people drive maritime. Better systems empower them to perform at their best.



RIPE FOR TRANSFORMATION

The industry sits on vast data and deep expertise. AI can unlock unprecedented efficiency and autonomy.

THE INDUSTRY WE SERVE

100K+

Vessels operating globally

1.89M+

Seafarers powering the industry

200+

Countries connected by maritime trade

1000+

Regulations, conventions & compliance frameworks

TRILLIONS

USD value of annual global sea trade

We don't just build for the maritime industry. We build with it, learn from it and grow with it.

07

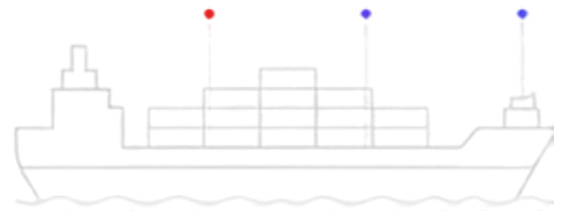
CAPABILITIES

END-TO-END. AI-NATIVE. IMPACT DRIVEN.

We combine domain expertise, engineering excellence and AI-native thinking to design and build systems that transform complex maritime operations.

OUR APPROACH

We work across the entire lifecycle — from strategy to deployment and continuous evolution. Our capabilities are designed to help maritime organizations modernize, automate and scale with intelligence.



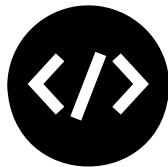
01



AI STRATEGY

- ✦ AI readiness assessment
- ✦ Opportunity identification
- ✦ Use case prioritization
- ✦ Roadmap & strategy

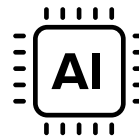
02



SOFTWARE ENGINEERING

- ✦ Custom software development
- ✦ Modern web & mobile apps
- ✦ Scalable backend systems
- ✦ Cloud-native architecture

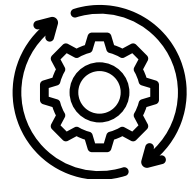
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AI SYSTEMS INTEGRATION

- ✦ AI model integration
- ✦ Third-party system integration
- ✦ API design & orchestration
- ✦ Data pipeline integration

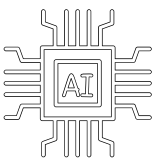
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AUTOMATION

- ✦ Workflow automation
- ✦ Process digitization
- ✦ RPA & task automation
- ✦ Operational efficiency

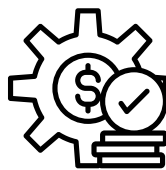
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INTERNAL AI

- ✦ Internal knowledge systems
- ✦ AI copilots & assistants
- ✦ Document intelligence
- ✦ Enterprise search

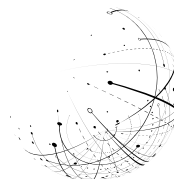
06



OPERATIONAL INTELLIGENCE

- ✦ Real-time dashboards
- ✦ Predictive analytics
- ✦ Anomaly detection
- ✦ Decision support systems

07



DIGITAL TRANSFORMATION

- ✦ Legacy system modernization
- ✦ System migration
- ✦ Process re-engineering
- ✦ Change enablement

08



SECURITY & GOVERNANCE

- ✦ Security by design
- ✦ Data governance
- ✦ Compliance support
- ✦ Risk & access management

OUR COMMITMENT

We don't just deliver solutions. We build long-term capability within your organization.
We grow when you grow.

Capabilities are important.
Execution with the right thinking
is what creates impact.

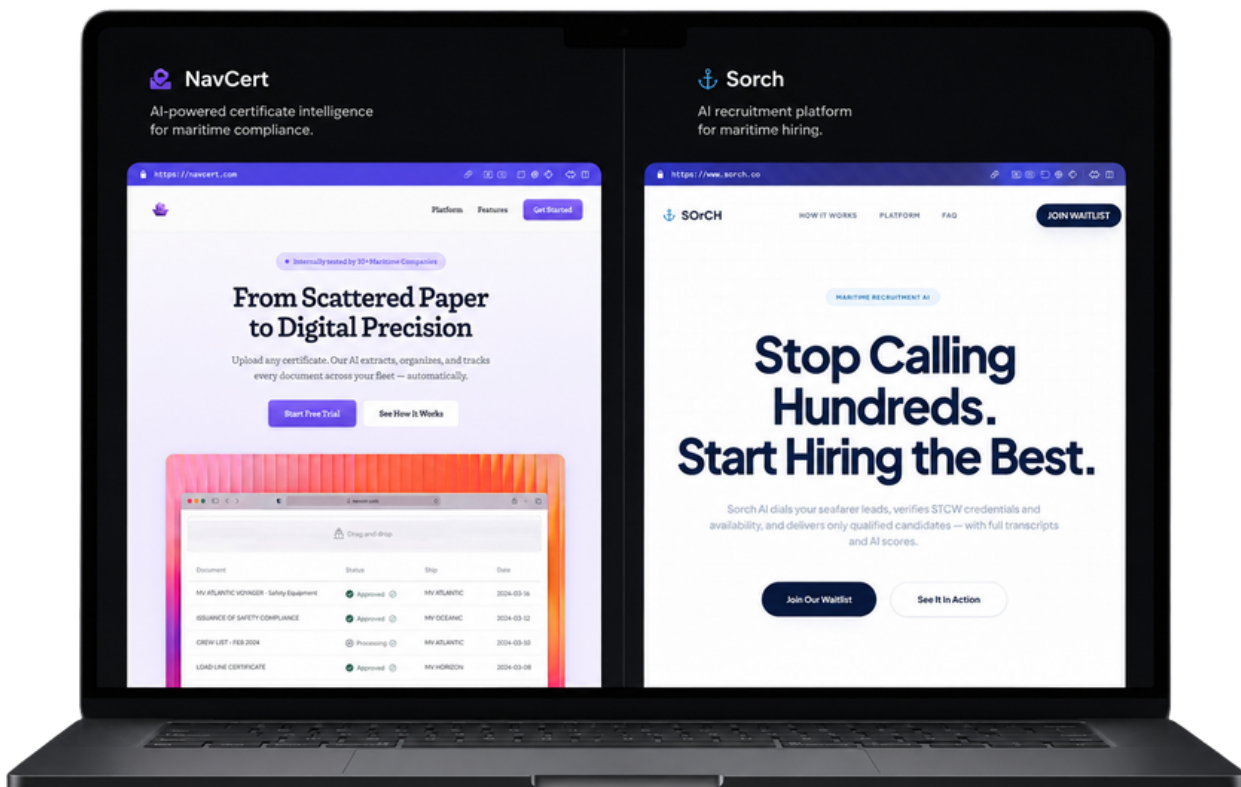
08 SYSTEMS WE'VE ENGINEERED

Real systems. Real systems. Real impact.



1. NAVCERT (<https://navcert.com>)

2. SORCH (<https://www.sorch.co/>)

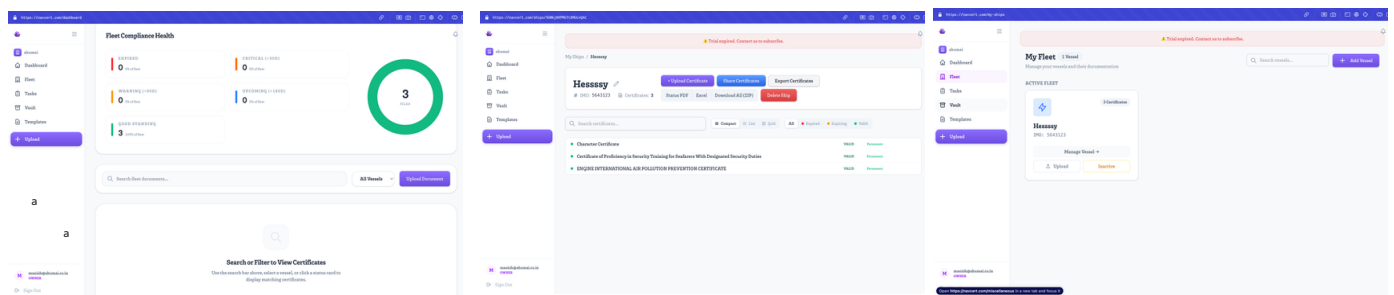


Navcert

01 / AI / MARITIME

AI- Powered Certicate Intelligence platform for maritime compliance and fleet-wide visibility

AI Extraction OCR Compliance Fleet Management Document Intelligence



PROBLEM

Managing vessel certificates has traditionally been a manual, fragmented process. Compliance teams spend countless hours collecting documents from emails, verifying expiry dates, updating spreadsheets, and ensuring vessels remain audit-ready. As fleets grow, administrative overhead increases dramatically, creating operational risk, delayed renewals, and reduced visibility across the organization.

ENGINEERING CHALLENGE

Managing vessel certificates has traditionally been a manual, fragmented process. Compliance teams spend countless hours collecting documents from emails, verifying expiry dates, updating spreadsheets, and ensuring vessels remain audit-ready. As fleets grow, administrative overhead increases dramatically, creating operational risk, delayed renewals, and reduced visibility across the organization.

SOLUTION

NavCert combines AI-powered document understanding with maritime domain intelligence to transform certificates into structured operational data.

The platform automatically:

- Extracts certificate information using AI
- Classifies maritime documents
- Tracks validity and expiry dates
- Generates renewal reminders
- Creates a centralized compliance repository
- Provides real-time fleet-wide visibility

Instead of managing documents manually, operators manage compliance proactively.

BUSINESS IMPACT

95%

Reduction in manual certificate processing

10×

Faster document verification

100%

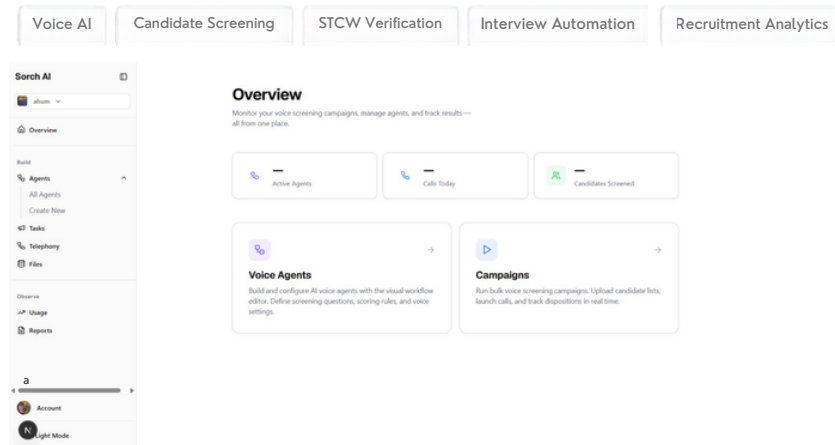
Centralized compliance visibility

100%

Automated renewal monitoring

Sorch

02 / AI / MARITIME



PROBLEM

Maritime recruitment is slow, repetitive, and heavily dependent on manual outreach. Recruiters spend hours calling candidates, verifying certifications, confirming availability, and documenting conversations before identifying a shortlist. As hiring demand increases, the process becomes difficult to scale—leading to longer hiring cycles, inconsistent candidate evaluation, and operational bottlenecks.

ENGINEERING CHALLENGE

Build an AI recruitment system capable of conducting natural voice conversations, understanding maritime terminology, verifying candidate information, and evaluating applicants consistently at scale. The platform needed to automate repetitive recruitment workflows while preserving the quality and accuracy expected by experienced recruiters.

SOLUTION

Sorch combines Voice AI with maritime domain intelligence to automate the first stage of recruitment.

The platform automatically:

- Conducts AI-powered voice interviews
- Verifies STCW certifications and documentation
- Confirms candidate availability and experience
- Generates structured interview transcripts
- Scores and ranks candidates using predefined criteria
- Delivers recruiter-ready shortlists through a centralized dashboard

Rather than replacing recruiters, Sorch eliminates repetitive screening work so teams can focus on hiring the right people faster.

BUSINESS IMPACT

5×

Faster candidate screening

60%

Reduction in time-to-hire

40%

Higher quality shortlisted candidates

100%

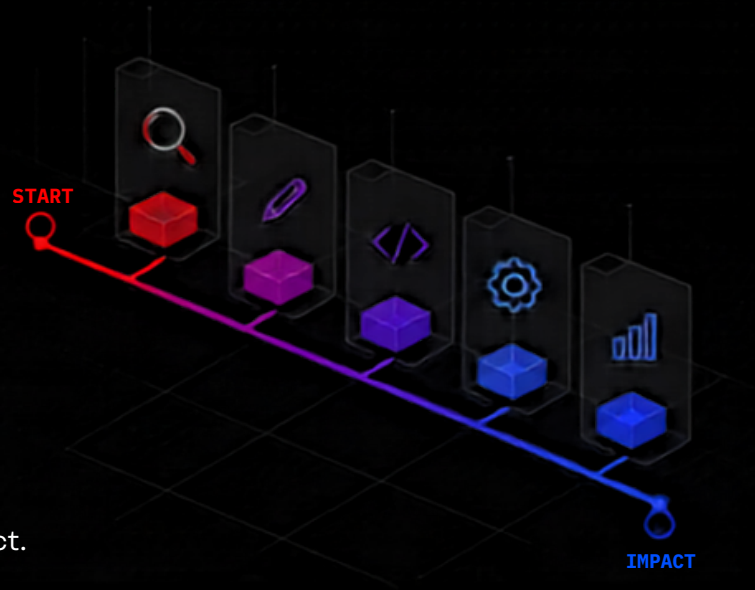
Call transcripts and AI-generated interview insights

09

OUR ENGINEERING PROCESS

A DISCIPLINED APPROACH.
BUILT FOR COMPLEXITY.

We follow a structured engineering process that ensures clarity, speed, quality and long-term impact. Every project is different. Our process remains constant.



01

DISCOVER



We understand the real problem.
We study the domain, people, data, systems and constraints.

Stakeholder interviews
Process understanding
Data & system audit
Problem framing
Success definition

02

DESIGN

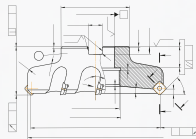


We design the right solution.
Architecture, workflows, data models and interfaces.

Solution architecture
Workflow design
Data design
Integration blueprint

03

ENGINEER



We build with quality and intention.
Clean code, scalable systems and robust integrations.

Agile development
Code reviews
Testing & QA
C/CD pipelines
Security by design

04

DEPLOY



We deploy with confidence.
Careful rollouts, monitoring and operational readiness.

Staging & testing
Deployment
Monitoring setup
Documentation
Team enablement

05

TEST



We continuously improve.
Feedback loops, analytics and iteration drive long-term impact.

Performance analytics
User feedback
Iteration and improvement
Feature evolution
Long-term support

OUR PROCESS PRINCIPLES

FOCUS ON THE RIGHT PROBLEM

We solve what matters most.

DESIGN FOR REAL-WORLD COMPLEXITY

We plan for scale, change and uncertainty.

BUILD WITH QUALITY

Clean code. Robust systems. Zero shortcuts.

A great process does not add complexity. It removes it. And builds confidence at every step.

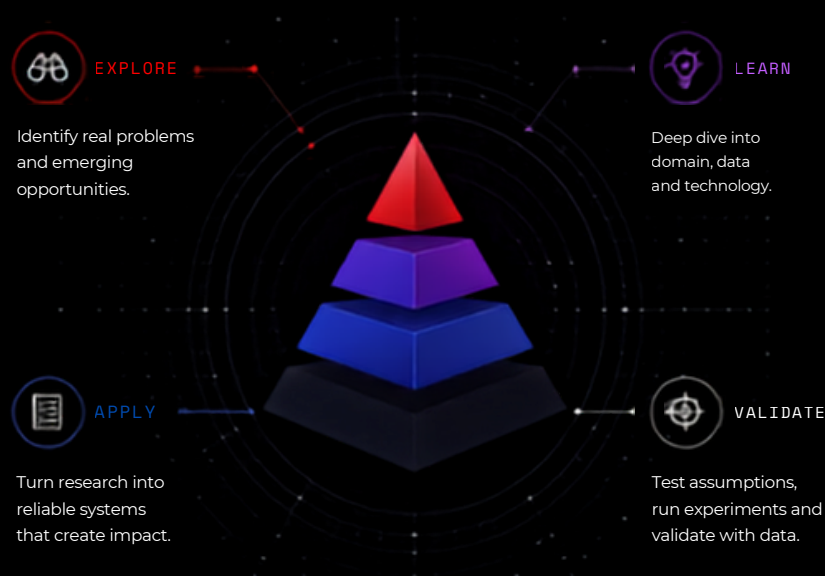
10

RESEARCH & KNOWLEDGE

WE RESEARCH, WE LEARN, WE BUILD BETTER.

Research is at the core of how we solve complex maritime problems. We combine domain insight, engineering rigor and emerging technologies to create systems that are future-ready.

We continuously explore, validate and apply knowledge to deliver real-world impact.



OUR RESEARCH FOCUS AREAS

MARITIME OPERATIONS

Improving efficiency, safety and decision-making across maritime workflows.

COMPLIANCE & REGULATIONS

Automating compliance intelligence and understanding evolving global regulations.

DATA & ANALYTICS

Tuning complex maritime data into insights that drive better outcomes.

AI & AUTOMATION

Building AI-native systems that learn, adapt and automate with intelligence.

SYSTEMS & ARCHITECTURE

Designing scalable, secure and resilient systems for the maritime ecosystem.

FUTURE TECHNOLOGIES

Exploring emerging technologies to solve tomorrow's maritime challenges today.

HOW WE RESEARCH

DOMAIN IMERSION

We engage with experts, operators and stakeholders to deeply understand real-world challenges.

DATA-DRIVEN EXPLORATION

We analyze data, identify patterns and uncover insights that lead to meaningful solutions.

EXPERIMENT & PROTOTYPE

We build prototypes, test ideas and validate hypotheses through rapid experimentation.

VALIDATE & REFINE

We validate with real users, refine continuously and ensure measurable impact.

THE MORE WE KNOW,
THE MORE IMPACT WE CREATE.

KNOWLEDGE IS OUR COMPETITIVE ADVANTAGE

We invest in deep work, continuous learning and knowledge sharing. Our internal knowledge base, research library and engineering playbooks ensure that every project benefits from collective intelligence.

OUR KNOWLEDGE SYSTEM

Research Library Cured papers, reports and domain insights.

Engineering Playbooks Reusable patterns, architectures and more.

INTERNAL KNOWLEDGE BASE

Documented learnings, guides and technical resources.

Learning Culture

We learn together, share openly and grow constantly.

KNOWLEDGE SHARING

Regular sessions, writeups and more.

INSTITUTIONAL MEMORY

Capturing insights to build long-term advantage.

Research turns uncertainty into clarity.
Knowledge turns clarity into systems.

11

CREDENTIALS

BUILT ON TRUST.
BACKED BY PERFORMANCE.

Our credentials reflect our commitment to quality, security, compliance and client success. We operate with global standards and maritime focus.

RECOGNITION & ACHIEVEMENTS



2X LIVE AI HACKATHON
(DALLAS ,US)

WINNER

For building impactful
AI solutions.



SUPERAI NEXT
SINGAPORE 2025

TOP 10 FINALIST

Among top AI teams
from across Asia.

12

THE PEOPLE BEHIND AHUMLABS

ENGINEERS BUILDERS. PROBLEM
SOLVERS. UNITED BY PURPOSE.

OUR LEADERSHIP & CORE TEAM

WHO WE ARE

Multidisciplinary Team

Experts in engineering, AI, data, design, maritime operations and compliance.

Mission Driven

We exist to solve real maritime problems with technology and integrity.

Client First

We listen, collaborate and go the extra mile for our clients' success.

Builders at Heart

We love building systems, automating complexity and creating leverage.



AHUMLABS WAS FOUNDED BY ENGINEERS FROM DIFFERENT
BACKGROUNDS WHO SHARED ONE BELIEF: SOFTWARE SHOULD
SOLVE OPERATIONAL PROBLEMS, NOT CREATE MORE COMPLEXITY.

13

ADVISORY BOARD



ADVISOR

Rabindra Sah

Chief Technology Officer, Indian Register of Shipping

Advises Ahum Labs on enterprise technology, engineering leadership, and the realities of introducing new systems into maritime organisations.

[LINKEDIN](#)


ADVISOR

Krishnan Subramaniam

Chief Learning Officer, Transworld Academy · International Chairman, ICS

Brings deep maritime leadership and learning experience, helping us connect technology with the people, knowledge, and standards behind the industry.

[LINKEDIN](#)


ADVISOR

Capt. Anupam Raizada

Co-founder and Director, Offing Group

Guides our understanding of maritime operations, workforce needs, and how technology must perform inside demanding real-world environments.

[LINKEDIN](#)


ADVISOR

Vijay Tandon

Former Marketing Consultant, South Asia · Magnus Health Management

Advises on market development, executive communication, and translating technical capability into a clear business proposition.

[LINKEDIN](#)

13 LOOKING AHEAD

BUILDING THE FUTURE OF
MARITIME, TOGETHER.

AhumLabs began with three founders from completely different journeys.
One explored AI through international hackathons and global developer communities.
Another immersed himself in software engineering and enterprise systems.
The third brought operational thinking and execution.

What united them wasn't a shared background—it was a shared frustration.
Across every conversation with maritime companies, they saw the same pattern:

fragmented workflows

disconnected software

repetitive manual operations

technology that failed the people using it

Instead of building another software company, they decided to build an engineering company focused on
creating intelligent systems that remove operational friction.

Today AhumLabs develops AI-native software, automation platforms and enterprise systems exclusively for
industries where reliability matters.



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