# Blue Trail Software

## Product UX/UI for Complex Systems

## Offering

**Product UX/UI for Complex Systems:** Helping SaaS and enterprise platforms transform complex, data-rich workflows into intuitive, scalable user experiences.

## Project Details

- **Client:** Bearing AI, a maritime SaaS platform revolutionizing shipping efficiency through predictive analytics, CII simulations, and voyage optimization tools.
- **Industry:** Maritime SaaS / Logistics Tech
- **Engagement Type:** Strategic UX/UI partnership for 0 - 1 product design
- **Services Used:** UX research, interaction design, design systems, data visualization, workflow simplification, dashboard design

## The Challenge

Bearing AI faced multiple UX/UI challenges typical of maritime analytics platforms:

- Dense, spreadsheet-driven workflows and outdated, hard-to-digest interfaces
- Highly complex domain (spot, tramp, liner markets) with varied roles and terminology
- Heavy, multi-dimensional data (fuel, weather, schedules, hull condition, emissions) that needed to be simplified without losing explainability
- Need to design multiple 0 - 1 products (CII Simulator + Live Dashboards, Deployment Planner, Cargo Prediction, Performance Analysis, Schedule Recovery, etc.) that work across several personas (i.e. analysts, charterers/ schedulers, ops/compliance)
- Requirement for a reusable, scalable design system to support future modules and enterprise pilots

## The BTS Solution

BTS embedded a senior UX/UI designer into Bearing AI's product and engineering teams and led end-to-end design across several 0 - 1 efforts:

- **CII Simulator + Live Dashboards:**
  Built plain-language simulations and drilldowns (fleet → vessel → voyage) to make complex compliance metrics (including CII and EEOI) usable day-to-day.
- **Deployment Planner:**
  Created a visual, color-coded planner that surfaces yearly CII, fuel consumption, emissions, days sailing, and schedule adherence; enabling fast side-by-side scenario comparisons, easy add/remove/swap of schedules by timeframe, or testing one schedule across multiple vessels.
- **Cargo Prediction Heatmap:**
  Designed a global heatmap to surface likely follow-on cargo at discharge ports, helping users reduce deadhead returns and place smarter bids.
- **Performance & Scheduling Tools:**
  Delivered voyage and vessel-level performance/fouling views (i.e. YTD and per-voyage breakdowns). We led the product-strategy phase for Schedule Recovery, and another designer carried forward into final design and delivery.
- **Reusable Design System & IA:**
  Established componentized tables, filters, compare trays, chart specs, and navigation patterns to support rapid growth and new modules without redesign.
- **User-Centered Research & Validation:**
  Bearing AI hired a recruitment agency to reach hard-to-find maritime users. Together with PMs, we ran interviews, analog-prototype tests, and competitive analysis (including competitor webinars). We also partnered with a sea captain and domain experts to validate patterns, language, and industry specifics (i.e. supply chains, chartering types).

## Impact & Results

- **Replaced spreadsheet-heavy flows** with explainable, actionable dashboards and planners
- **Faster decision-making:** users move from question → scenario → decision with fewer manual calculations
- **Clear trade-offs at a glance:** CII, fuel, emissions, days sailing, and schedule impact surfaced together for defensible choices
- **Scalable UX foundation:** patterns and design system allowed new modules to be added without major redesign
- **Commercial validation:** Deployment Planner helped secure a pilot with Hapag-Lloyd; Performance Analysis work supported wins with IINO and K" Line
- **Market differentiation:** users described the interfaces as "unlike anything we've seen in shipping," accelerating adoption conversations

With BTS as a strategic UX partner, Bearing AI transformed dense maritime planning into intuitive, scalable products, accelerating adoption and driving enterprise growth.