Portfolio

Jonathan Elmgren

Volvo Cars

Demo: https://volvocars.com/
Tech: Typescript, React, Next.js, Node.js, GraphQL, REST, Headless CMS (ContentStack), ADO

As a central part of the volvocars.com development team, I have worked to improve the web experience by further developing the home page, category pages and electrification pages with **Next.js, TypeScript and App Router**. I have also built interactive tools such as **Range Map, Range Calculator and Charging Cost Tool** to improve the customer experience.

In addition to frontend development, I have developed a **recommendation engine** which compiles data from multiple systems to automatically generate market-specific car recommendations based on popularity and sales trends.

I have also had a supervisor role for LIA students, where I have coached and supported future developers in their professional development.

Mystery Lane - Website and Booking System

Demo: https://mysterylane.se
Tech: Typescript, React, Next.js, Node.js, REST, Headless CMS (Payload CMS), Linux/Ubuntu

I have built **Mysterylane's website** from scratch with **Next.js, TypeScript** and one **headless CMS** to create a fast and search engine optimized experience. The website is adapted for escape room operations and contains informative pages and landing pages for various events.

In addition to the website, I have developed one **customized booking system** which handles advanced logic for booking times and pricing, specifically adapted for escape room operations. The system takes into account factors such as group size, time schedules and special pricing to optimize both the user experience and business operations.

Mystery Lane - Escape Room Technology and Puzzle System

Demo: Internal system
Tech: Python, WebSockets, MQTT

I have developed Mysterylane's escape room technology with **ESP32, Python, MQTT and WebSockets** to create a seamless gaming experience. The puzzles and room logic are connected in a network and communicate in real time, enabling dynamic and interactive challenges.

For maximum flexibility and maintainability, I have implemented **OTA (Over-The-Air) Updates**, making it easy to push updates to any device without physical access.

Mystery Lane - Escape Room Control System

Demo: Internal system
Tech: Typescript, React, Next.js, Node.js, REST, Linux/Ubuntu, WebSockets

In addition to the puzzles, I have built one **customized control system** to manage the entire escape room business. The system handles, among other things:

- **Remote control of rooms and puzzles** - launch, restore and monitor the game in real time.
- **Monitoring via cameras and sensors** - ensure the flow of the game and give clues when necessary.
- **Automated scenarios** - e.g. activation of light, sound and effects at specific events.
- **Integration with the booking system** - game start and timing are automatically adjusted according to bookings.

The system is built to be **robust, flexible and easy to maintain**, making it easy to scale and adapt as needed.

The Concrete Association - User roles and membership

Demo: Backend
Tech: PHP, cPanel, SQL, WordPress, WooCommerce (E-com)

For **The Concrete Association** I have worked with backend development on their **WordPress website**, where I have built one **membership system** which handles **automatic payments for membership** via an ongoing subscription model.

The system includes support for **corporate membership**, where employees automatically gain access to membership benefits based on the company's subscription. By integrating WooCommerce and custom WordPress features, I've created a **smooth and automated handling** of membership, payments and user rights.

Tillfest.se – Personalized Student Signs

Demo: https://tillfest.se/
Tech: React, WordPress, WooCommerce, Klarna, PHP, REST API

I have developed **Tillfest.se**, a website where customers can design their own **personal student badges** directly online. The website is built with **WordPress and WooCommerce**, where I have integrated one **React-based personalization feature** which enables live editing of signs before purchase.

This React solution is **seamlessly integrated** with WooCommerce and WordPress, allowing the design and order information to be handled smoothly through existing e-commerce

functions. The payment flow is implemented with **Klarna**, ensuring a simple and flexible payment process for customers.

Charles Dickens - Restaurant & Event Tickets

Demo: Internal solution
Tech: WordPress, PHP, WooCommerce, MySQL, REST API, QR-kodgenerering

For **the Charles Dickens restaurant** I have developed one **event ticketing system**, fully integrated with their **WordPress and WooCommerce platform**. The system handles **advanced pricing** depending on event type, date and booking status.

Features include:

- **Automatically generates QR codes** for each ticket.
- **QR scan at the entrance** to validate tickets and manage entry.
- I**ntegration med WooCommerce** for smooth payment and order processing.

The system ensures an efficient **and automated ticketing process**, making it easy for restaurants and guests to manage reservations and entrance.

Odinn – CRM for Lead management and Job distribution

Demo: Internal solution
Tech: Next.js, TypeScript, MongoDB, Node.js, REST API, Role-based Access Control

I have developed Odin, one **customized CRM system** for a company that runs dozens of lead generating websites within moving cleaning and moving assistance. The system acts as an intermediary between customers and local businesses and manages the job distribution

- **Automatic handling of leads** - incoming booking requests are matched with suitable companies.
- **Role-based access control** - local companies have their own accounts and are assigned assignments based on region and capacity.
- **Dashboard for business** - overview of assigned jobs, status updates and order history.

Taiga – Scalable E-Commerce Platform with Pimcore

Demo: https://taiga.se
Tech: PHP, Symfony, Pimcore, MySQL, REST API, ERP-integration

Together with a team, we have developed **Taiga**, an advanced **e-commerce platform** where **Pimcore is used** as **PIM** to manage product information and flows across multiple sites. The system is built to handle **complex business rules and pricing logic**, enabling a customized experience for each customer.

- **Multi-site and user-specific pricing** – dynamic price management based on user role and assigned price list.
- **Advanced authentication and permissions** – different customer groups see specific prices and products depending on their account type.
- **Integration with ERP** – fully automated flow for product data, stock management and order management.
- **Built with Pimcore and Symfony** – robust and scalable backend solution for managing large product catalogs.

BuddyCompany – Backlog Indicator & Automation Tool

Demo: Internal solution
Tech: MongoDB, Express, React, Node.js (MERN)

I have developed **BuddyCompany's Backlog Indicator**, one **internal system** built with **The MERN stack** to manage and visualize **available assignments** in real time. The system contained advanced **logic for dialing, messaging and other actions** to ensure that SLA times were managed effectively.

- **Live overview of available missions** - streamlined handling of customer cases.
- **Advanced SLA management** – automatic reminders and escalation in case of SLA breach risk.
- **Automated flows** – reduced manual handling through automation of tasks.
- **Significant operational improvements** – SLA results improved from **86% to 95.7%**, and **FTE (Full Time Equivalent) decreased from 2 to 1**.

System optimized **operations team workflows** by replacing manual processes with automation, resulting in increased efficiency and faster case handling

BuddyCompany – Route Scheduler

Demo: Internal solution
Tech: MongoDB, Express, React, Node.js (MERN), Google Maps API

I have developed **BuddyCompany's Route Scheduler**, one **customized scheduling system** where **Google Maps API** used to optimize route planning and employee scheduling.

- **Automatic route optimization** – the fastest possible route is calculated based on the mission's location and traffic conditions.
- **ETA calculation** – estimated arrival time is generated and communicated to the customer.
- **Easy scheduling** - employees are assigned assignments by simply entering booking details, after which the system calculates travel time and optimal route.
- **Integration with Google Maps API** – dynamic route calculations based on current traffic data.

C Land – Headless WordPress med Next.js

Demo: https://cland.se/
Tech: Next.js, TypeScript, WordPress (Headless), GraphQL, Node.js

I have developed **C Land's web platform** with one **headless WordPress solution**, their **Next.js** used as front end and **GraphQL** to retrieve data efficiently.

- **Headless WordPress med GraphQL** – fast and flexible content management without classic WordPress templating.
- **Next.js for frontend** – performance-optimized and SEO-friendly solution with static and dynamic rendering.
- **Optimized for speed and user experience** – modern architecture with **fast loading times and smooth navigation**.
- **API-driven content** – dynamic data retrieval via GraphQL to ensure a scalable and future-proof solution.

The platform combines WordPress' powerful CMS functions with Next.js for a modern, fast and user-friendly experience.

WordPress Projects - Custom Websites & E-Commerce

Tech: WordPress, PHP, ACF, Gutenberg, WooCommerce, MySQL

I have developed about 30 **WordPress websites** with my own **custom theme**, built with **Advanced Custom Fields (ACF) och Gutenberg** to provide customers with a flexible and easy-to-use administrative experience. Some projects have also included **WooCommerce** for e-commerce.

Examples of websites I have built:

- **Wrap And Go** - E-commerce for the sale of gift wrapping paper via school classes and associations.
- **Horse and Stuff** - E-commerce for horse accessories.
- **ZacZess** - E-commerce for horse clothing.
- **Motor sports insurance** - Insurance site focused on motorsport.
- **Golf insurance** – Insurance solutions for golfers.
- **Event insurance** – Specialized insurance for events.
- **FeelNJoy** – Virtual spa concept for workplaces.
- **Star joy** – Reuse and gift shop and café.
- **PDK Riv and Remediation** - Company page for a cleaning company.
- **The CBT Coaches** - Website for a CBT coaching business.
- **Borås IT** - IT services for private individuals.
- **Smart Home Solutions** – Smart home solutions and services.
- **Pelle Glas** - Company page for a glass workshop.
- **MA Automation** - Website for an electronics and automation company.

With several..