

# Project highlights

## Group ski/snowboard trip booking platform

A web application where users can organize and/or signup for public and private group trips. I was the back-end developer on the project and did all the base architecture and high level design, I also wore the hat of "product software manager" as I was closely involved with the requirements gathering, planning, weekly client meetings, as well as leading the rest of the team.

### Features

- Flexible booking options, bus and room management, room assignments
- A custom cart and checkout implementation, payment integration
- Listing and detail pages for public and private trips
- Dashboard for account management, trip management and order history
- Custom admin reports and actions for efficient daily management

**Challenges:** Understanding business rules and nomenclature around room options and room assignments

**Learning moments:** Stripe Integration, custom checkout flow

**Parts I enjoyed the most:** A very engaging client, a very interesting project to work on overall

## Delivery system for organic products

An application where customers are able to order a weekly delivery box of products, customized to their preferences. I was one of three back-end developers working on the project and was in charge of the initial system architecture including app planning and database schema. From there my work revolved around implementing business processes in the admin.

### Features

- A multitude of reports and batch management screens for inventory and product management, as well as supplier and supplier product management
- Implemented a feature that predicts supplier orders based on future customer orders
- Various custom admin views for packers, delivery staff, and accounting

**Challenges:** Very tight deadline, very demanding client, an exception to every business rule

**Learning moments:** Good foundation goes a long way, stretching Django admin to its limits

**Parts I enjoyed the most:** Massive amounts of complexity, "The staff are going to love you, you just implemented in one screen what they did in 10 in the old app"

## Community management

An application to manage networks, groups and members, events and projects.

### Features

- Ability to follow people, groups and events/projects
- Activity streams
- Group management, creating events, managing members
- Member profile dashboard

**Challenges:** Ambiguous requirements

**Learning moments:** Good planning makes a project under-budget and team going in the right direction

**Parts I enjoyed the most:** As a community manager myself it was really fun to build a project that was beneficial to me directly and to put on that "customer" hat.

## Job application platform

A web application where users can signup to be potential applicants for corporations looking to hire. The staff manages the users, screens them and selects them to be shortlisted to a company.

### Features

- Private dashboard for employers
- Account signup and management
- Job ad management

## Large county CMS website

A large government website with thousands of pages to manage county services and provide information for residents.

### Features

- Django CMS setup, customization, and plugin development
- Integration with a few 3rd party services
- Importing messy data from old website
- Major CMS and Django upgrade during maintenance phase

**Challenges:** Caching and performance, CMS upgrade was a challenge

**Learning moments:** Multi server setup on Azure

**Parts I enjoyed the most:** Data migration

## Shop selling teacher materials and digital goods

An application for selling physical and digital goods. The shop used Django Oscar as the e-commerce framework and parts of the application were overridden as necessary.

### Features

- Custom checkout flow
- Integration with a 3rd party seller of digital goods (majority of catalog)
- Advanced search with faceting using Solr
- Data import

**Challenges:** Unresponsive client

**Learning moments:** Understanding Django Oscar

**Parts I enjoyed the most:** Search faceting, integration for digital good downloads

## Magazine style subscription site

A web application with public and private articles, subscription management, and business statistics. I was one of two backend developers and worked on an app that converts data from a csv into html tables, with complete customization as to how the data is displayed.

### Features

- Datatables - CSV to html with full customization
- Search capability using Solr
- Private subscriptions
- Event management

**Challenges:** Timezones and infinitely recurring events

**Learning moments:** Pandas and Data Frames

**Parts I enjoyed the most:** Designing the functionality of the datatables

## Conference app

A web application for an annual teachers conference.

### Features

- Proposal submission and conversion

- Calendar and event listing
- Integration with 3rd party app for event export

## **Small CMS websites**

I have been involved in over 40 smaller websites in every flavour of Django CMSs. In the end I introduced and championed the use of Wagtail CMS, brought all the departments on board and significantly increased company profit as a result.

### **Features**

- Used a multitude of CMSs like Wagtail, Django CMS, Mezzanine, FeinCMS, Fluent
- Built a great bootstrap project to jump off of for faster implementation