

MARK KOPEC

P: 647-884-7223

mark.kopec@gmail.com

www.mkopec.com

[LinkedIn](#)

[Github](#)

Software Developer, licensed Professional Engineer and Project Management Professional with over 10 years of experience

SKILLS

Front-end: JavaScript ES5+, React.js, Redux, D3.js, CSS3, HTML5

Back-end: Ruby, Ruby on Rails, Node.js, AJAX, AXIOS, Express, SQL, Rspec, MongoDB, Amazon Web Services

Other: Rest API, Git & GitHub, Atom, VSCode, MatLAB, AutoCAD, SolidWorks, Heroku, webpack, OOP

PROJECTS

Rise | (React/Redux - Rails 5 - AWS S3, SES - Google Material UI)

[live](#) | [github](#)

Full stack application that helps users get raises and promotions by tracking their goals and accomplishments

- Integrated AWS SES notification system to send email reminders to users based on their selected preference settings
- Led the design process for UX and UI, including feature selection, storyboarding, wireframing, and user testing.
- Implemented Google's Material UI library to create a unified and intuitive interface, which allowed users to taking advantage of core features faster
- Utilized a node-scheduler to trigger asynchronous functions that pushed notifications to the user, increasing user engagement and improving UX

Air-Camp | (React/Redux, Rails 5, AWS S3)

[live](#) | [github](#)

Faithful reproduction of the website HipCamp

- Optimized web component renderings using React lifecycle methods and Redux state changes, resulting in a minimal number of DOM operations for a faster user interface
- Utilized Active Storage to store image uploads using AWS S3, reducing server load and allowing app scaling
- Incorporated user authentication with database and model-level validations, allowing passwords to be safely stored with a PostgreSQL database and prevented users from signing up with non-unique usernames

PowderGraph | (JavaScript, D3.js)

[live](#) | [github](#)

Data visualization for snow and rain amounts in Lake Louise, Canada over the past century

- Designed an algorithm that parsed and filtered 1,000+ data points from a csv file which only maintained the data necessary for the visualization, resulting in a lightweight and responsive application
- Employed the D3 exit/update/enter cycle to ensure seamless transitions in response to user selection

EXPERIENCE

Project Manager

Imperial Oil Ltd.

May 2011 - May 2016, March 2017 - Sep 2017

- Overhauled the division's purchase order creation & monitoring and project development & estimating processes by creating a variety of VBA macros that automated several of the manual input processes and report extractions with SAP which resulted in a reduction in financial recording errors of 87% and data entry time reduction of 73%
- Supervised construction crews onsite and demonstrated strong conflict resolution by effectively mediating disputes between various contractor groups

Internal Auditor

Imperial Oil Ltd.

Oct 2016 - Dec 2016

- Automated the organization's Excel scheduling process by developing a VBA macro to connect the existing manual Excel based process to MS Project which reduced administrative burden of a task that used to take 5 days out of a month to complete, to 1 day while reducing or eliminating common human errors

Mechanical & Reliability Engineer

Imperial Oil Ltd.

Sep 2007 - May 2011

- Developed a Python algorithm to manipulate 3D laser scan data for large industrial equipment and automatically built it in a stress analysis modeling software for analysis, reducing typical assessment time from 1 month to 3 days
- Demonstrated strong technical capabilities and innovative problem solving when completing detailed analysis of equipment failures and developed custom repair options to extend the utility of equipment

EDUCATION

University of Toronto - BAsC Mechanical Engineering, 2007

AppAcademy - Full Stack Software Developer Course - 2019