

Josh Hogg
403-923-7656
josh.n.hogg@gmail.com
<http://www.joshhogg.com>
<http://github.com/hobz->

PROFILE

Looking to transition to Software Development, from Petroleum Engineering. Diverse background, seven years of experience working in the Oil and Gas Industry, four years of which involved reservoir and project management. Proficient with interpreted languages (JavaScript, Python, Ruby) and Web Development (React, Ruby on Rails, HTML/CSS). Strong technical worker with practical understanding of the key drivers behind reservoir management and the economics of projects. Reputation for working in a high pressure environment and achieving multiple deliverables while prioritizing business needs. Recognized for promoting a team environment, mentoring and collaboration.

SELECTED HIGHLIGHTS

- Initiated the development of a forecasting tool that coupled in-house analytical forecasting outputs with monthly steam allocation forecasts across the full field, resulting in more accurate long term forecasts. This is now the standard forecasting tool for the business unit.
- Self-taught developer with a focus on building tangible products using React, and NodeJS, and version control with git
- Managed the documentation of the LRP for the Surmont Project for multiple years, communicating with various disciplines and groups to agree on required inputs, and subsequently developing a management approved forecast
- In previous roles, approached and persuaded management to pilot various technologies in the field to optimize production and reduce costs
- Coached new team members on unique technical skills and workflows that increased their confidence and performance

SOFTWARE EXPERIENCE

PERSONAL PROJECTS – Available on GitHub

NFL PICK-EMS APP

React application, built to help with an in-house NFL pool for a previous employer. During the development, gained experience with modularization of React code, state management, and component lifecycle. Also spent time writing scripts with node to scrape nfl.com for game and results data. For the application, all user data is stored externally on firebase, which handles user authorization and database management.

SEINFELD SCENE CREATOR

React and NodeJS application to allow the user to annotate and append gifs to create scenes from Seinfeld. Extensive use of Promises in NodeJS to handle asynchronous operations, as image resizing and annotating was done server side. Deployed server to Heroku. HTTP requests and responses were used to connect with external APIs at GIPHY and imgur.

PACMAN CLONE

Modularized design in pure JavaScript. All engine code for collision detection and AI was written from scratch. Gained experience working with Objects, Prototypes and Inheritance in JavaScript. HTML5 / Canvas was used for graphics rendering.

PROFESSIONAL EXPERIENCE**Petroleum Engineer, Oil Sands and Western Canadian Business Unit**

2010 to 2017

ConocoPhillips, Calgary, Alberta

Provided subsurface development and forecast engineering for existing/greenfield pads, de-bottlenecking projects, and internal business processes (LRP, X+Y, emerging technologies). Provided simulations and field analysis to support operations on existing Surmont 1 production, and Surmont 2 ramp-up and forecasting. Processed and Analyzed production data and metrics in order to optimize field production

- Main developer of the Integrated Asset Model, a forecasting tool which used Python and VBA to account for steam allocation across all of Surmont in order to optimize full field iSOR
- Built STARS models to optimize operational strategy for thief zone pads to limit risk of Top and Bottom Water interaction, recommending ESP Acceleration for problem pads
- Developed future pad and facility expansion plans with a multidisciplinary team, which required a full field resource assessment for up to five project phases, incorporating data from hundreds of delineation wells, and presented the plan to management to incorporate in Long Range Plans
- Processed simulation outputs using Python and MATLAB, to provide an input into an asset wide company database in SPOTFIRE; the database functioned as a repository for all forecasts across the organization and allowed for data analysis and field optimization
- Provided forecasting and subsurface work for approval of \$65M S1 Debottlenecking Expansion AFE, which included a thorough sustaining resource assessment

EDUCATION

Bachelor of Science in Oil and Gas Engineering; University of Calgary, Alberta, Canada; 2010

TECHNICAL SKILLS

JavaScript, SQL, Python, Ruby, React, NodeJS, Ruby on Rails, OFM, SPOTFIRE, VBA, MATLAB, SAP, Microsoft Office